

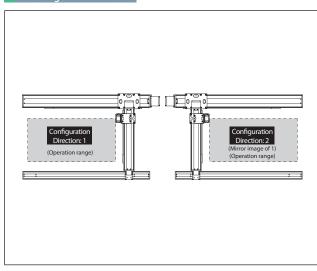
ICSB3-G1J□HB1[Battery-less Absolute XYG+ZB Y Horiz. Gantr Z Base Mount X-Y-Z 3-axis High-Precision ICSPB3-G1J Specification ■ Model Specification G1J□HB1□ WA -**T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Delatery-less 100: 1000mm Refer to S0: 500mm Refer to 10: 1000mm Refer to Absolute Options 1 Options Options 100: 1000mm Table 60: 600mm Table (Every 100mm) below. (Every 100mm) below. (Every 50mm) below. Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* Cable Y-axis - Z-2 Length Manag 3L: 3m 5L: 5m Refer to E L: Specified of Model length Designati Series Y-axis - Z-axis Cable Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below Refer to Explanation precisio... specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G1J1HB1H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-G1J1HB1M-①-23-43-67-T2-0-9
	L	ICSB3[ICSPB3]-G1J1HB1L-①-②③-④⑤-⑦-T2-⑧-⑨
	Н	ICSB3[ICSPB3]-G1J2HB1H-①-②③-④③-⑥⑦-T2-⑧-⑨
2	М	ICSB3[ICSPB3]-G1J2HB1M-①-②③-④⑤-D-T2-⑧-⑨
	L	ICSB3[ICSPB3]-G1J2HB1L-①-②③-④⑤-⑥7-T2-⑥-⑨

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-10-400-20-20-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-10-200-20-40-T2-10-53	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for 1 through 2 in the above model names.

 Note that the strokes are indicated in mm (millimeters).
- * Lead is specified with literal in the above model names. 16: For Z-axis High Speed type 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

- Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	100: 1000mm 250: 2500mm							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	50: 500mm ? 70: 700mm							
(5)	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm							
7	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track							

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options specify them in alphabetical order

when selecting multiple options, specify them in apprabetical order.										
Туре	Model	Reference page								
X-axis cable exit direction	*	See P.11, P.353								
AQ seal (standard equipment)	AQ	See P.353								
Brake (equipped as standard on Z-axis) *1	В	See P.353								
Creep sensor *2	C/CL	See P.353								
Home limit switch *2	L/LL	See P.353								
Non-motor end specification	NM	See P.353								
Guide with ball-retaining mechanism *3	RT	See P.354								

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration
- direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
- "3 Cannot be selected for High-Precision Specification.

 "To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/16mm (H), 8mm (M), 4mm (L)

Applicable Controllers

 ${\tt Contact\ IAI.\ The\ controller\ for\ this\ system\ needs\ to\ be\ purchased/prepared\ separately.}$

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller

The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



Y-axis stroke 500~700

■G1J□HB1H

■G1J□HB1L

-		17011	DIL
	_		Y-axis stroke
			500~700
		100	
		150	
		200	
	Z-axis stroke	250	
		300	
	s st	350	14.0
	-axi	400	
	Z	450	
		500	
		550	
		600	

500 550 ■G1J□HB1M

		Y-axis stroke
		500~700
	100	
	150	
	200	
au	250	
Z-axis stroke	300	
s st	350	7.0
-aX	400	
Z	450	
	500	
	550	
	600	

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HB1H

	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	1200								_							
Z-axis	96	50								_							

■G1J□HB1M

	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		_		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	1200								_							
Z-axis	4	80								_							

■G1J□HB1L

	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		_		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	1200								_							
Z-axis	24	10								_							

ICSB3 [ICSPB3]-G1J□HB1□-CT-CT (Cable track specification)

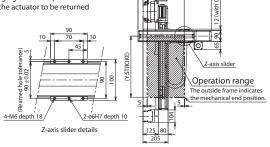
Dimensions

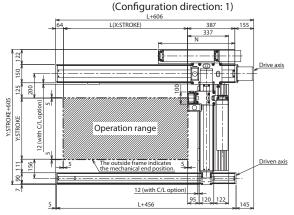


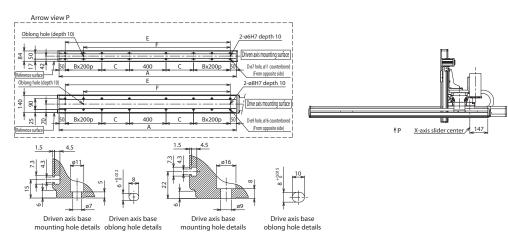
position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.











X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	- 1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



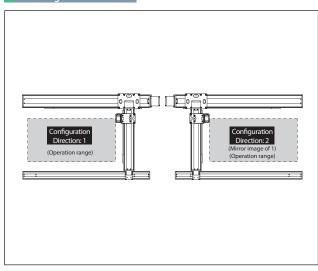
ICSB3-G1J□HB2□ Battery-less Absolute X: Lg (400W) Y: Md (200W) Z: Md (100W) X-Y-Z ±5μm High-Precision ICSPB3-G1J□HB2 Specification ■ Model Specification G1J HB2 WA -**T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Delatery-less 100: 1000mm Refer to S0: 500mm Refer to 10: 1000mm Refer to Absolute Options 1 Options Options 100: 1000mm Table 60: 600mm Table (Every 100mm) below. (Every 100mm) below. (Every 50mm) below. Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* Cable Y-axis - Zaxis Cabu Length Management 3L: 3m 5L: 5m Refer to Epianation IL: Specified of Model length Designations below Series Y-axis - Z-axis Cable Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below precisio... specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G1J1HB2H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-G1J1HB2M-①-②③-④⑤-D-T2-⑥-⑨
	L	ICSB3[ICSPB3]-G1J1HB2L-①-②③-④⑤-⑦-T2-⑧-⑨
	Н	ICSB3[ICSPB3]-G1J2HB2H-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-G1J2HB2M-①-②③-④⑤-⑥⑦-T2-⑥-⑨
	L	ICSB3[ICSPB3]-G1J2HB2L-①-② ③-④ ⑤-⑦-T2-⑥-⑨

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
*2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration *Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-11-400-20-22-T2-11-33	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-10-200-20-40-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1]-100-10-6-T2-11-7	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

5: For Z-axis Low Speed type

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	100: 1000mm 250: 2500mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	50: 500mm ? 70: 700mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track					

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]				
Positioning repeatability	±0.01mm [±0.005mm]				
Lost motion	0.05mm [0.02mm] or less				
Guide Integrated with base					
Base	Material: Aluminum with white alumite treatment				
X-axis motor output/lead	400W/20mm				
Y-axis motor output/lead	200W/20mm				
Z-axis motor output/lead	100W/20mm (H), 10mm (M), 5mm (L)				

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the



controller The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The

payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

in the above model names.

Note that the strokes are indicated in mm (millimeters).

Lead is specified with [iii] in the above model names.

20: For Z-axis High Speed type

10: For Z-axis Medium Speed type

Cable exit direction is specified with n in the above model names. Please refer to P.11 for the exit directions.



■G1J□

J∐HB2H									
	Y-axis stroke								
	500~700								
100									
150									
200									
250									
300									
350	5.0								

E G1	J∏HB2L
	JUIDZL

		Y-axis stroke
		500~700
	100	
	150	
	200	
۵	250	20.0
ş	300	
s st	350	
Z-axis stroke	400	
Z	450	19.5
	500	19.0
	550	18.5
	600	18.0

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HB2H

	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		_		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 1200								_								
Z-axis	1200								_								

■G1J□HB2M

E C DE LIDEM																	
	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
Y-axis	— 1200								_								
Z-axis	600									_							

■G1J□HB2L

		100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-a	xis		_		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-a	xis	— 1200								_								
Z-a	xis	300								_								

■G1J□HB2M

		Y-axis stroke				
		500~700				
	100					
	150					
	200					
۵	250					
ş	300					
s st	350	10.0				
Z-axis stroke	400					
Z	450					
	500					
	550					
	600					

ICSB3 [ICSPB3]-G1J□HB2□-CT-CT (Cable track specification)

Z:STROKE+343

Dimensions



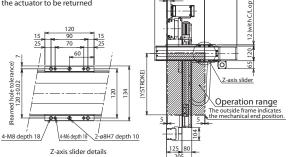


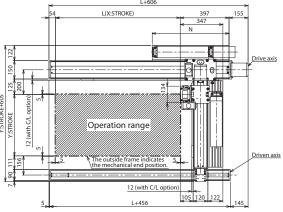


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

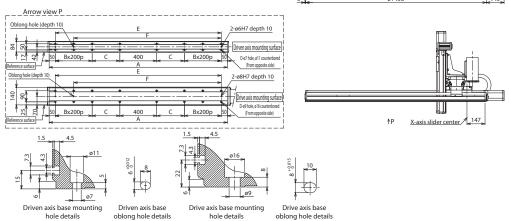


Cable track location	G
First axis	40
Second axis	60





(Configuration direction: 1)



X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



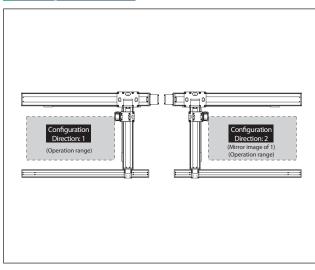
ICSB3-G1J□HB3□ Battery-less Absolute XYG+ZB Y Horiz. Gantr Z Base Mount X: Lg (400W) Y: Md (200W) Z: Md (200W) X-Y-Z High-Precision ICSPB3-G1J Specification ■ Model Specification G1J□HB3□ WA -**T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Delatery-less 100: 1000mm Refer to S0: 500mm Refer to 10: 1000mm Refer to Absolute Options 1 Options Options 100: 1000mm Table 60: 600mm Table (Every 100mm) below. (Every 100mm) below. (Every 50mm) below. Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Zaxis Cabu Length Management 3L: 3m 5L: 5m Refer to Epianation IL: Specified of Model length Designations below Series Y-axis - Z-axis Cable Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below XSEL-RA/SA precision specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	Н	ICSB3[ICSPB3]-G1J1HB3H-①-②③-④⑤-T2-⑥-⑨
'	М	ICSB3[ICSPB3]-G1J1HB3M-T)-23-45-67-T2-8-9
2	Н	ICSB3[ICSPB3]-G1J2HB3H-①-②③-④⑤-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-G1J2HB3M-①-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-10-200-20-40-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-11-200-101-66-T2-11-7	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- Note that the strokes are indicated in mm (millimeters).

 Lead is specified with [9] in the above model names.

 20: For Z-axis High Speed type

 10: For Z-axis Medium Speed type
- * Cable exit direction is specified with 11 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	100: 1000mm 250: 2500mm							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	50: 500mm							
5	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm							
7	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track							

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

	T	
Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limits witch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
 *3 Cannot be selected for High-Precision Specification.
 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm (H), 10mm (M)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



- (Note 2) The cable length is the length between the X-axis connector box and the controller
 - The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
- (Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.
 When the acceleration is increased, the payload will be reduced.
- (Note 4) Please note that a longer stroke will result in a lower max speed.



■G1J□HB3H

	חכפח∟נוטם											
		Y-axis stroke										
		500~700										
	100											
	150											
	200											
a	ພ 250											
충	300											
s st	350	10.0										
Z-axis stroke	400											
Z	450											
	500											
	550											
	600											

■G1J□HB3M

		Y-axis stroke
		500~700
	100	
	150	
	200	
a	250	20.0
ş	300	
is st	350	
Z-axis stroke	400	
7	450	19.5
	500	19.0
	550	18.5
	600	18.0

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HB3H

	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 1200							_									
Z-axis	1200									_							

■G1J□HB3M

	100~450	500~600 700		1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		_		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	120	0							_							
Z-axis	60	600								_							

ICSB3 [ICSPB3]-G1J□HB3□-CT-CT (Cable track specification)

Z:STROKE+368

Z:STROKE

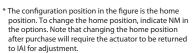
Dimensions

CAD drawings can be



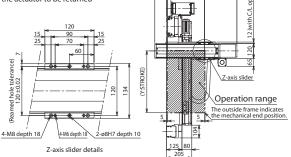


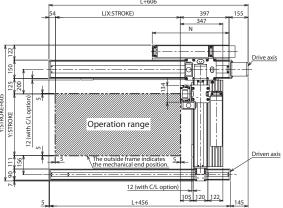




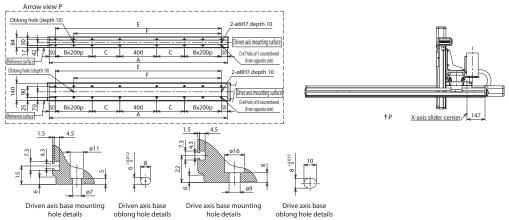


Cable track location	G
First axis	40
Second axis	60



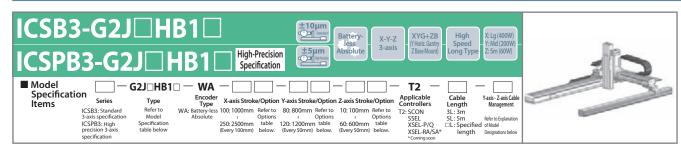


(Configuration direction: 1)



X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



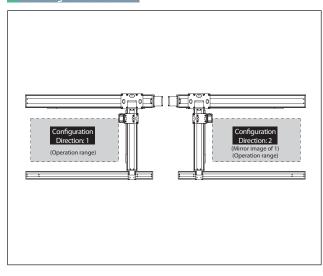


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G2J1HB1H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-G2J1HB1M-1]-23-43-67-T2-8-9
	L	ICSB3[ICSPB3]-G2J1HB1L-①-② ③-④ ⑤-⑦-T2-⑥-⑨
	Н	ICSB3[ICSPB3]-G2J2HB1H-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-G2J2HB1M-①-② ③-④ ③-⑥ ⑦-T2-⑥-⑨
	L	ICSB3[ICSPB3]-G2J2HB1L-①-②③-④⑤-⑦-T2-⑧-⑨

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
*2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	_
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-⑪-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for 🛈 through 🖸 in the above model names.

- Note that the strokes are indicated in mm (millimeters).

- Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with
 in the above model names.

 16: For Z-axis High Speed type

 8: For Z-axis Medium Speed type

 4: For Z-axis Low Speed type

 *Cable exit direction is specified with
 the above model names.

 Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/16mm (H), 8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller.

The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

^{*1} Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

^{*3} Cannot be selected for High-Precision Specification.

^{*} To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.



■G2J□HB1H

_~							
		Y-axis stroke					
		800~1,200					
	100						
	150						
	200						
Z-axis stroke	250						
	300						
s st	350	3.5					
-axi	400						
Z	450						
	500						
	550						
	600						

■G2J□HB1M

		J 1111
		Y-axis stroke
		800~1,200
	100	
	150	
	200	
a	250	
ğ	300	
s st	350	7.0
Z-axis stroke	400	
Z	450	
	500	
	550	
	600	

■G2J□HB1L

		Y-axis stroke
		800~1,200
	100	
	150	
	200	
a	250	
Z-axis stroke	300	
s st	350	14.0
ķ	400	
7	450	
	500	
	550	
	600	

Maximum Speed by Stroke (mm/s) (Note 4)

■G2J□HB1H

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_	1200		1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	1200	1100		-											
Z-axis	960							-	_							

■G2J□HB1M

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_	1200		1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	1200	1100							_						
Z-axis	480							-	_							

■G2J□HB1L

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_	1200		1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	1200	1100							_						
Z-axis	240							-	_							

ICSB3 [ICSPB3]-G2J□HB1□-CT-CT (Cable track specification)

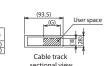
Dimensions

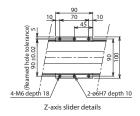




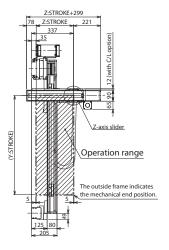


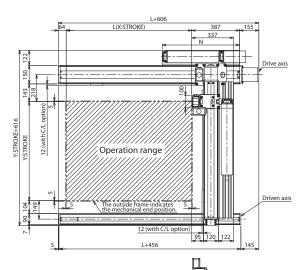
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

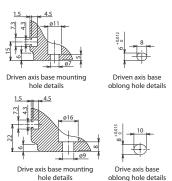




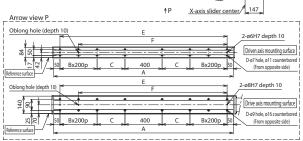
(Configuration direction: 1)







oblong hole details



X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	- 1	1	- 1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



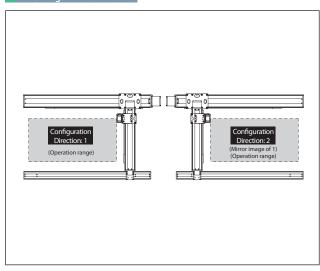
ICSB3-G2J□HB2□ Battery-less Absolute XYG+ZB (Y Horiz, Gantry Z Base Mount) X: Lg (400W) Y: Md (200W) Z: Md (100W) X-Y-Z ±5μm High-Precision ICSPB3-G2J□HB2 Specification ■ Model Specification G2J□HB2□ WA -**T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Datery-less 100: 1000mm Refer to 80: 800mm Refer to 10: 100mm Refer to Absolute Coptions 1 Options 2 Options Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* Cable Y-axis - Zaxis Cabu Length Management 3L: 3m 5L: 5m Refer to Epianation IL: Specified of Model length Designations below Series Y-axis - Z-axis Cable Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Battery-le Absolute precisio... specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G2J1HB2H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-G2J1HB2M-①-23-43-67-T2-8-9
	L	ICSB3[ICSPB3]-G2J1HB2L-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
	Н	ICSB3[ICSPB3]-G2J2HB2H-①-②③-④⑤-⑦-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-G2J2HB2M-①-②③-④⑤-⑥⑦-T2-⑥-⑨
	L	ICSB3[ICSPB3]-G2J2HB2L-①-②③-④⑤-⑥⑦-T2-⑥-⑨

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	_
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-⑪-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-100-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for 🛈 through 🖸 in the above model names.
- Note that the strokes are indicated in mm (millimeters).

- Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with

 10. For Z-axis High Speed type

 10. For Z-axis Medium Speed type

 5: For Z-axis Medium Speed type

 *Cable exit direction is specified with

 11 in the above model names.
 Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 120: 1200mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/20mm (H), 10mm (M), 5mm (L)

Applicable Controllers

<u>∧</u> Notes

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).

(Note 2) The cable length is the length between the X-axis connector box and the controller.
The standard lengths are 3m and 5m, but other lengths can also be specified

in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.





■G2J□HB2H

	4J 1	DZII
		Y-axis stroke
		800~1,200
	100	
	150	
	200	
a	a 250	
충	300	
s st	350	5.0
Z-axis stroke	400	
Z	450	
	500	
	550	
	600	

■G2J□HB2M

		Y-axis stroke
		800~1,200
	100	
	150	
	200	
a	250	
ş	300 350 400	
s st	350	10.0
-axi	400	
Z	450	
	500	
	550	
	600	

■G2J□HB2L

		Y-axis stroke	
		800~1100	1200
	100		20.0
	150		20.0
	200		20.0
a	250 300 350 400	20.0	19.5
충			18.9
s st	350		18.2
ķ	400		17.6
7	450	19.5	17.0
	500	19.0	16.4
	550	18.5	15.7
	600	18.0	15.1

Maximum Speed by Stroke (mm/s) (Note 4)

■G2J□HB2H

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_	120	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	1200	1100							_						
Z-axis	1200								_							

■G2J□HB2M

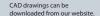
		100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
	X-axis	_	120	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
	Y-axis	_	1200	1100							_						
- [7-axis	600								_							

■G2J□HB2L

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_	1200	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	1200	1100							_						
Z-axis	300								_							

ICSB3 [ICSPB3]-G2J□HB2-CT-CT□ (Cable track specification)

Dimensions









* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

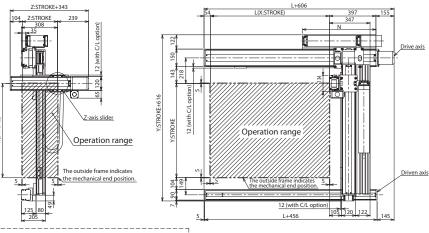
4-M8 depth 18

Z-axis slider details Arrow view P



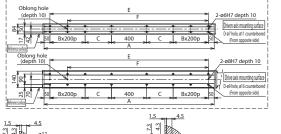


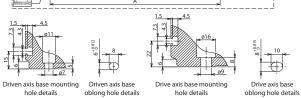
(Configuration direction: 1)



ΛP

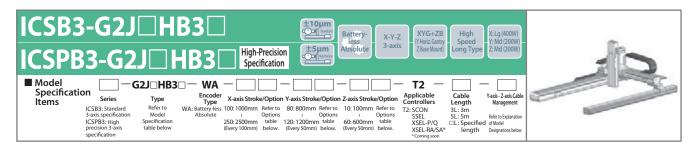
X-axis slider center





X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	- 1	- 1	- 1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375





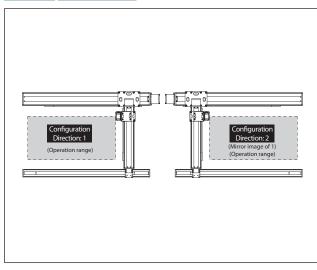
Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	Н	ICSB3[ICSPB3]-G2J1HB3H-①-②③-④⑤-T2-⑥-⑨
'	М	ICSB3[ICSPB3]-G2J1HB3M-①-23-45-67-T2-8-9
2	Н	ICSB3[ICSPB3]-G2J2HB3H-①-②③-④⑤-T2-⑥-⑨
	М	ICSB3[ICSPB3]-G2J2HB3M-①-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right
- for details of 1 through 1 in the model names above.

 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-10-400-20-20-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-11-200-101-66-T2-11-7	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for 1 through 2 in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 * Lead is specified with 10 in the above model names.

 20. For Z-axis High Speed type

 10. For Z-axis Medium Speed type

- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	100: 1000mm 250: 2500mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	80: 800mm 1 120: 1200mm					
(5)	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track					

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification	NM	See P.353		
Guide with ball-retaining mechanism *3	RT	See P.354		

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]				
Positioning repeatability	±0.01mm [±0.005mm]				
Lost motion 0.05mm [0.02mm] or less					
Guide Integrated with base					
Base	Material: Aluminum with white alumite treatment				
X-axis motor output/lead	400W/20mm				
Y-axis motor output/lead	200W/20mm				
Z-axis motor output/lead	200W/20mm (H), 10mm (M)				

Applicable Controllers

 ${\tt Contact IAI. The controller for this system needs to be purchased/prepared separately.}$

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm



(Note 2) The cable length is the length between the X-axis connector box and the controller.

The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated

acceleration.
When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■G2J□HB3H

Y-axis stroke 800~1,200 100 150 200 250 300 350 10.0 400 450 500 550

■G2J□HB3M

	_	Y-axis str	oke	
		800~1000	1100	1200
	100		20.0	20.0
	150		20.0	20.0
	200		20.0	19.6
a	250	20.0	20.0	18.9
Z-axis stroke	300		20.0	18.3
s st	350		19.7	17.7
-ax	400		19.1	17.1
7	450	19.5	18.4	16.4
	500	19.0	17.8	15.8
	550	18.5	17.1	15.1
	600	18.0	16.5	14.5

Maximum Speed by Stroke (mm/s) (Note 4)

■G2J□HB3H

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_	1200)	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	1200	1100							_						
7 avic	1200															

■G2J□HB3M

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_	1200)	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	1200	1100							_						
Z-axis	600								_							

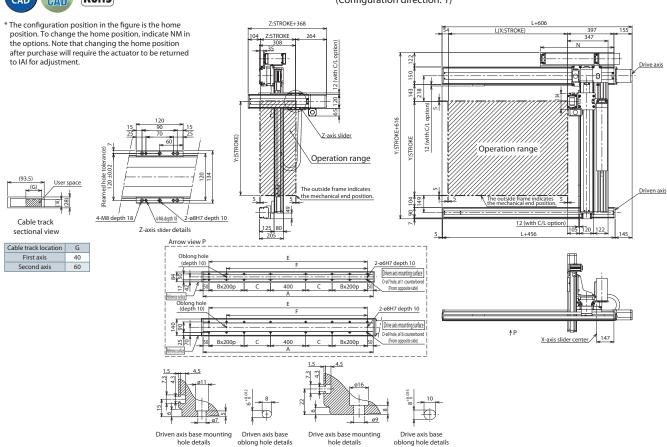
ICSB3 [ICSPB3]-G2J□HB3□-CT-CT (Cable track specification)

CAD drawings can be downloaded from our website.





(Configuration direction: 1)



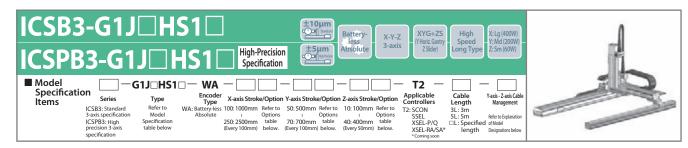
Drive axis base mounting

hole details

1014								1800	1900	2000	2100	2200	2300	2400	2500
1017	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375
	1 275 12 1350 1150	1 1 275 325 12 12 1350 1450 1150 1250	1 1 1 275 325 375 12 12 12 1350 1450 1550 1150 1250 1350	1 1 1 1 1 1 275 325 375 425 12 12 12 12 12 1350 1450 1550 1650 1150 1250 1350 1450	1 1 1 1 1 1 1 275 325 375 425 475 12 12 12 12 12 12 1350 1450 1550 1650 1750 1150 1250 1350 1450 1550	1 1 1 1 1 1 275 325 375 425 475 525 12 12 12 12 12 12 1350 1450 1550 1650 1750 1850 1150 1250 1350 1450 1550 1650	1 2 2 5 1	1 1 1 1 1 1 1 2 275 325 375 425 475 525 575 425 12 12 12 12 12 12 12 12 16 1350 1450 1550 1650 1750 1850 1950 2050 1150 1250 1350 1450 1550 1650 1750 1850	1 1 1 1 1 1 1 2 2 275 325 375 425 475 525 575 425 475 12 12 12 12 12 12 12 16 16 16 1350 1450 1550 1650 1750 1850 1950 2050 2150 1150 1250 1350 1450 1550 1650 1750 1850 1950	1 1 1 1 1 1 1 2 2 2 275 325 375 425 475 525 575 425 475 525 12 12 12 12 12 12 16 16 16 1350 1450 1550 1650 1750 1850 2950 2150 2250 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050	1 1 1 1 1 1 1 2 2 2 2 2 275 325 375 425 475 525 575 425 475 525 575 12 12 12 12 12 12 16 16 16 16 16 1350 1450 1550 1650 1750 1850 1950 2050 2150 2250 2150 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2150	1 1 1 1 1 1 1 2 2 2 2 3 275 325 375 425 475 525 575 425 475 525 575 425 12 12 12 12 12 16 16 16 16 20 1350 1450 1550 1650 1750 1850 1950 2050 2150 2250 2250 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2150 2250	1 1 1 1 1 1 1 1 2 2 2 2 3 3 275 325 375 425 475 525 575 425 475 525 575 425 475 12 12 12 12 12 16 16 16 20 20 1350 1450 1550 1550 1650 1750 1850 1950 2050 2150 2250 2350 2450 2350 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2150 2250 2350	1 1 1 1 1 1 1 1 2 2 2 2 3 3 3 275 325 375 425 475 525 575 425 475 525 12 12 12 12 12 16 16 16 20 20 20 1350 1450 1550 1650 1750 1850 2050 2150 2250 2350 2450 2550 2650 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2150 2250 2250 2350 2450	1 1 1 1 1 1 1 1 2 2 2 2 3 3 3 3 275 325 375 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 <th< td=""></th<>

hole details





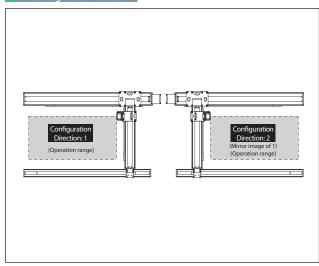
Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-G1J1HS1M-①-②③-④⑤-6⑦-T2-⑥-⑨
'	L	ICSB3[ICSPB3]-G1J1HS1L-①-② ③-④ ⑤ ⑦-T2-⑧-⑨
2	M	ICSB3[ICSPB3]-G1J2HS1M-①-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-G1J2HS1L-①-②③-④⑤-⑦-T2-⑥-⑨

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 11 through 12 in the model names above.

 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-11-400-20-22-T2-11-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- In the above model names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with in the above model names.
 For Z-axis Medium Speed type
- 4: For Z-axis Low Speed type
- Cable exit direction is specified with the in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ? 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options specify them in alphabetical order

when selecting multiple options, specify them in upprobetical order.						
Туре	Model	Reference page				
X-axis cable exit direction	*	See P.11, P.353				
AQ seal (standard equipment)	AQ	See P.353				
Brake (equipped as standard on Z-axis) *1	В	See P.353				
Creep sensor *2	C/CL	See P.353				
Home limit switch *2	L/LL	See P.353				
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353				
Guide with ball-retaining mechanism *4	RT	See P.354				

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *I is rake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.

 *2 When selecting the creep sensor and home limits witch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 *4 Cannot be selected for High-Precision Specification.

 To set a different X-axis cable exit direction from the normal settino, indicate the cable exit direction symbol

- *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

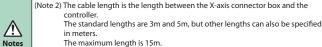
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]			
Positioning repeatability	ning repeatability ±0.01mm [±0.005mm]			
Lost motion	0.05mm [0.02mm] or less			
Guide	Integrated with base			
Base	Material: Aluminum with white alumite treatment			
X-axis motor output/lead	400W/20mm			
Y-axis motor output/lead	200W/20mm			
Z-axis motor output/lead	60W/8mm (M), 4mm (L)			

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.



■G1J□HS1M

/-axis stroke 500~700 100 150 3.9 3.1 250

■G1J□HS1L

		_	Y-axis stroke
			500~700
		100	11.3
	Z-axis stroke	150	10.9
		200	10.5
		250	10.1
		300	9.8
		350	9.4
		400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HS1M

	100~400	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	_	1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	1200							_							
7-axis	480								_							

■G1J□HS1L

	100~400	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	1200							_							
7-avic	240								_							

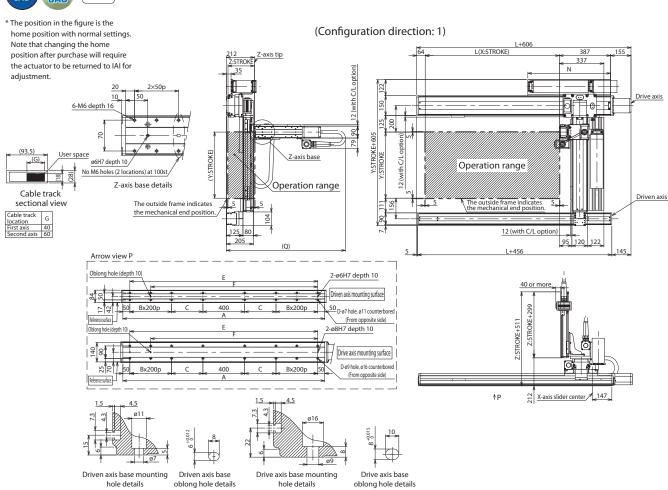
ICSB3 [ICSPB3]-G1J□HS1□-CT-CTSC (Cable track - Cable track + Self-standing cable specification)

Dimensions









2650 2750 2850 2950 525 575 625

2650 2750

2850

O dimension Z-axis stroke 100 150 200 250 300 350 400 450 500

Q	900	950	1000	1050	1100	1150	1200	1250	1300							
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	250
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	25
Α	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	29
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
	275	225	275	425	475	525	575	425	475	525	575	425	475	525	575	67

 1350
 1450
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 2150
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 2050
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 2250
 2350

625 675 725 775 825 875 925 975 1025 1075 1125 1175 1225 1275 1325 1375



ICSB3-G1J□HS2L ±10µm Battery-less XYG+ZS X: Lg (400W) Y: Md (200W Z: Md (100W Hiah 3-axis ±5µm Absolute Z Slider ICSPB3-G1J□HS2 High-Precision Specification ■ Model -G1J□HS2L-– WA **T2** Specification Items Encoder Type WA: Battery-less 100:1000mm Refer to 50:500mm Refer to 10:100mm Refer to Absolute 250:2500mm table 50:500mm table 50:500mm table 50:500mm table 60:500mm table Applicable Controllers Cable Y-axis - Z-axis Cab Management Series Type ICSB3: Standard T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon ICSPB3: High precision 3-axis specification Specification table below

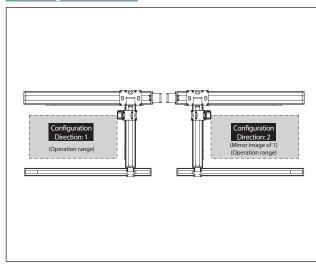
Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	L	ICSB3[ICSPB3]-G1J1HS2L-①-②③-④⑤-⑥⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-G1J2HS2L-①-②③-④⑤-⑦-T2-⑧-⑨

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.

 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-10-400-20-20-172-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-100-5-⑥-T2-⑩-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).
- * Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm ¿ 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ? 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm ? 50: 500mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

aprazetta oraci						
Туре	Model	Reference page				
X-axis cable exit direction	*	See P.11, P.353				
AQ seal (standard equipment)	AQ	See P.353				
Brake (equipped as standard on Z-axis) *1	В	See P.353				
Creep sensor *2	C/CL	See P.353				
Home limit switch *2	L/LL	See P.353				
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353				
Guide with ball-retaining mechanism *4	RT	See P.354				

- **Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.

 **2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

 **3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 **4 Cannot be selected for High-Precision Specification.

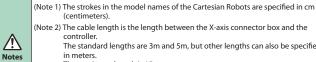
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]		
Positioning repeatability ±0.01mm [±0.005mm]			
Lost motion 0.05mm [0.02mm] or less			
Guide	Integrated with base		
Base	Material: Aluminum with white alumite treatment		
X-axis motor output/lead	400W/20mm		
Y-axis motor output/lead	200W/20mm		
Z-axis motor output/lead	100W/5mm		

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.



controller.
The standard lengths are 3m and 5m, but other lengths can also be specified

in meters The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.



■G1J□HS2L

		Y-axis stroke
		500~700
	100	14.8
	150	14.2
۵	200	13.6
Z-axis stroke	250	12.9
is st	300	12.3
-a×	350	11.6
7	400	11.0
	450	10.4
	500	9.8

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HS2L

	100~500	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		_	1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	1200							_							
7-axis	300								_							

ICSB3 [ICSPB3]-G1J□HS2L-CT-CTSC (Cable track - Cable track + Self-standing cable specification)

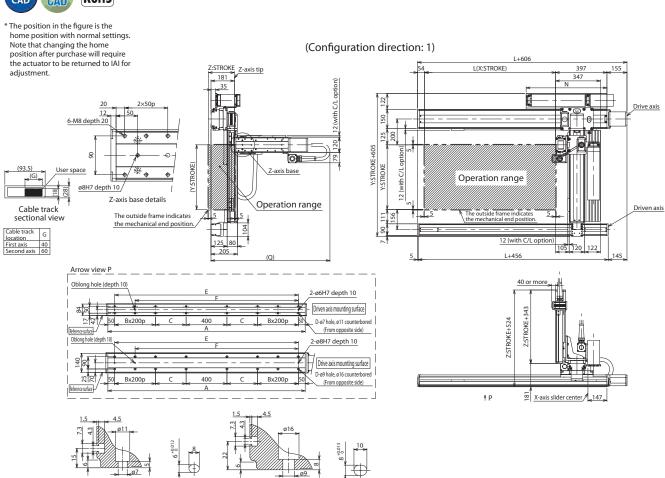
Dimensions

CAD drawings can be downloaded from our website









Drive axis base

oblong hole details

Q dimension

Z-axis stroke	100	150	200	250	300	350	400	450	500
Q	900	950	1000	1050	1100	1150	1200	1250	1300

Driven axis base mounting Driven axis base

oblong hole details

hole details

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

Drive axis base mounting

hole details



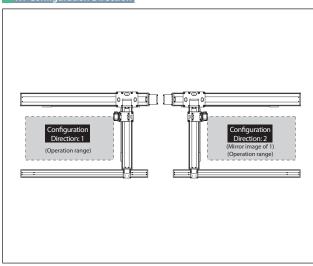
ICSB3-G1J□HS3M XYG+ZS Y Horiz. Gantry Z Slider) High Speed Long Type X: Lg (400W) Y: Md (200W) Z: Md (200W) X-Y-Z Absolute High-Precision ICSPB3-G1J□HS3 Specification ■ Model Specification - WA -**T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Datery-less 100: 1000mm Refer to S0: 500mm Refer to Options Option Date Option Da Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-2 Length Manag 3L: 3m 5L: 5m Befer to E L: Specified of Model length Designati Series Y-axis - Z-axis Cabl Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Battery-le Absolute XSEL-RA/SA precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-G1J1HS3M-①-23-@-67-T2-@-9
2	М	ICSB3[ICSPB3]-G1J2HS3M-①-23-03-07-T2-09

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-10-400-20-20-172-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-10-7	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters).
- *Cable exit direction is specified with 100 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ? 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm ? 50: 500mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order

when selecting multiple options, specify them in appropriate.										
Туре	Model	Reference page								
X-axis cable exit direction	*	See P.11, P.353								
AQ seal (standard equipment)	AQ	See P.353								
Brake (equipped as standard on Z-axis) *1	В	See P.353								
Creep sensor *2	C/CL	See P.353								
Home limit switch *2	L/LL	See P.353								
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353								
Guide with ball-retaining mechanism *4	RT	See P.354								

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limits wistch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.
 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.
 *4 Cannot be selected for High-Precision Specification.

- *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

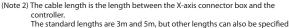
Common Specifications * Items in brackets [] are for the High-Precision Specification.

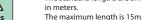
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).





(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.

When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.



■G1J□HS3M

		Y-axis stroke
		500~700
	100	14.3
	150	13.6
۵	200	13.0
Z-axis stroke	250	12.3
s st	300	11.7
-axi	350	11.1
Z	400	10.5
	450	9.8
	500	9.2

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HS3M

	100~500	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	-	1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	1200							_							
7-avic	600															

ICSB3 [ICSPB3]-G1J□HS3M-CT-CTSC (Cable track - Cable track + Self-standing cable specification)

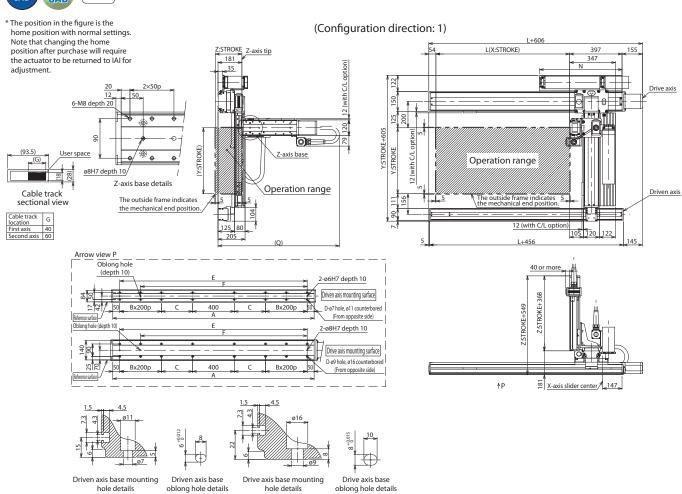
Dimensions

CAD drawings can be downloaded from our website









Q dimension Z-axis stroke 100 150 200 250 300 350 400 450 500 Q 900 950 1000 1050 1100 1150 1200 1250 1300

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



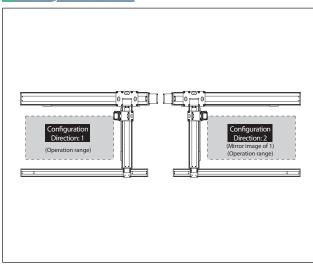
ICSB3-G2J□HS1□ Battery-less Absolute XYG+ZS (Y Horiz. Gantry Z Slider) X-Y-Z High-Precision ICSPB3-G2J∏HS Specification ■ Model Specification G2J□HS1□ WA **T2** K-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option X-axis St Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis-2-2 Length Manag 3L: 3m 5L: 5m Refer to E □L: Specified of Model length Designati Series Y-axis - Z-axis Cabl Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Battery-le Absolute XSEL-RA/SA precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-G2J1HS1M-①-23-43-67-T2-8-9
'	L	ICSB3[ICSPB3]-G2J1HS1L-①-②③-④⑤-⑦-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-G2J2HS1M-①-②③-④⑤-⑥⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-G2J2HS1L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-10-400-20-20-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- Note that the strokes are indicated in mm (millimeters).
 Lead is specified with [10] in the above model names.
 8: For Z-axis Medium Speed type
 4: For Z-axis Low Speed type
- * Cable exit direction is specified with n the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	100: 1000mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	80: 800mm ? 120: 1200mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable					

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

<u> </u>									
Туре	Model	Reference page							
X-axis cable exit direction	*	See P.11, P.353							
AQ seal (standard equipment)	AQ	See P.353							
Brake (equipped as standard on Z-axis) *1	В	See P.353							
Creep sensor *2	C/CL	See P.353							
Home limit switch *2	L/LL	See P.353							
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353							
Guide with ball-retaining mechanism *4	RT	See P.354							

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.

 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

- Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 *4 Cannot be selected for High-Precision Specification.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

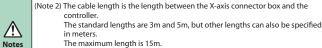
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]					
Positioning repeatability	±0.01mm [±0.005mm]					
Lost motion	0.05mm [0.02mm] or less					
Guide	Integrated with base					
Base	Material: Aluminum with white alumite treatment					
X-axis motor output/lead	400W/20mm					
Y-axis motor output/lead	200W/20mm					
Z-axis motor output/lead	60W/8mm (M), 4mm (L)					

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.



■G2J□HS1M

	■G2J□H3 HWI									
		Y-axis stroke								
		800~1,200								
	100	4.3								
a	150	3.9								
rok	200	3.5								
Z-axis stroke	250	3.1								
-axi	300	2.8								
Ż	350	2.4								
	400	2.1								

■G2J□HS1L

		_	Y-axis stroke
			800~1,200
		100	11.3
	roke	150	10.9
		200	10.5
	is st	250	10.1
	Z-axis stroke	300	9.8
		350	9.4
		400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■G2J□HS1M

	1	100~400	800~900	1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-ax	is	_	-	120)	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-ax	is	_	12	.00	1100							_						
Z-ax	is	480																

■G2J□HS1L

	100~400	800~900	1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-		1200)	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	12	200	1100							_						
Z-axis	240																

ICSB3 [ICSPB3]-G2J□HS1□-CT-CTSC (Cable track - Self-standing cable specification)

(Configuration direction: 1)

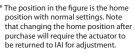
Z:STROKE

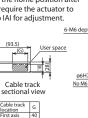


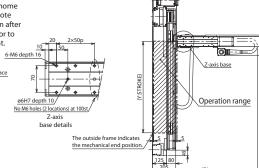


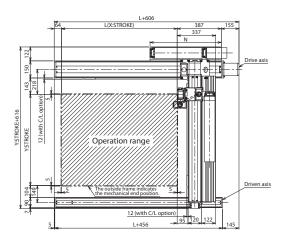


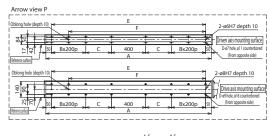


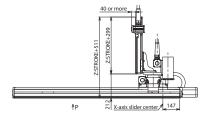


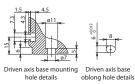














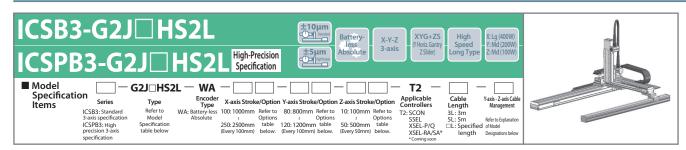


Q dimension

Z-axis stroke	100	150	200	250	300	350	400	450	1250
Q	900	950	1000	1050	1100	1150	1200	500	1300

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	- 1	1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



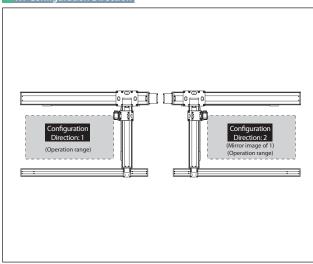


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	L	ICSB3[ICSPB3]-G2J1HS2L-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-G2J2HS2L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-①-400-20-②-T2-⑩-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	_
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-100-5-⑥-T2-⑩-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for 🛈 through 🕡 in the above model names. Note that the strokes are indicated in mm (millimeters).
- Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm ¿ 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order

when selecting multiple options, specify them in ulphabe		
Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.

 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

- Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 4 Cannot be selected for High-Precision Specification.

 7 Ose at afferent X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

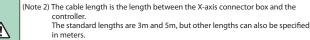
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/5mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.





■G2J□HS2L

		Y-axis stroke						
		800~1,200						
	100	14.8						
	150	14.2						
a	200	13.6						
Z-axis stroke	250	12.9						
is st	300	12.3						
-a×	350	11.6						
7	400	11.0						
	450	10.4						
	500	9.8						

Maximum Speed by Stroke (mm/s) (Note 4)

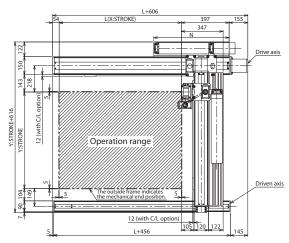
■G2J□HS2L

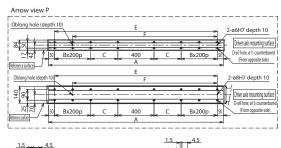
	100~500	800~900	1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-		1200)	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	_	12	200	1100							_						
7-axis	300																

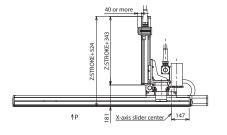
ICSB3 [ICSPB3]-G2J□HS2L-CT-CTSC (Cable track - Self-standing cable specification)

Dimensions CAD drawings can be downloaded from our website. (Configuration direction: 1) 2D CAD RoHS Z-axis tip * The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for 6-M8 depth 20 OM--adjustment. (93.5) Operation range Cable track sectional view base details Cable track G

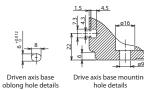
The outside frame indicates the mechanical end position.













Q dimension

Z-axis stroke	100	150	200	250	300	350	400	450	500
Q	900	950	1000	1050	1100	1150	1200	1250	1300

1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2200	2400	0500
				1400	1500	1000	1700	1800	1900	2000	2100	2200	2300	2400	2500
1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375
1	1 275 12 1350 1150	1 1 275 325 12 12 1350 1450 1150 1250	1 1 1 2275 325 375 12 12 12 1350 1450 1550 1150 1250 1350	1 1 1 1 275 325 375 425 12 12 12 12 1350 1450 1550 1650 1150 1250 1350 1450	1 1 1 1 1 275 325 375 425 475 12 12 12 12 12 1350 1450 1550 1650 1750 1150 1250 1350 1450 1550	1 1	1 1	1 1 1 1 1 1 1 2 275 325 375 425 475 525 575 425 12 12 12 12 12 12 16 3350 1450 1550 1650 1750 1850 1950 2050 1150 1250 1350 1450 1550 1650 1750 1850	1 1 1 1 1 1 1 2 2 275 325 375 425 475 525 575 425 475 12 12 12 12 12 12 16 16 16 3350 1450 1550 1650 1750 1850 1950 2050 2150 1150 1250 1350 1450 1550 1650 1750 1850 1950	1 1 1 1 1 1 1 2 2 2 275 325 375 425 475 525 575 425 475 525 12 12 12 12 12 12 16 16 16 3350 1450 1550 1650 1750 1850 1950 2050 2150 2250 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2050	1 1 1 1 1 1 1 2 2 2 2 275 325 375 425 475 525 575 425 475 525 575 12 12 12 12 12 16 16 16 16 3350 1450 1550 1650 1750 1850 1950 2050 2150 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2150	1 1 1 1 1 1 1 1 2 2 2 2 3 275 325 375 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 475 525 575 425 425 475 525 575 425 475 525 575 425 475 525 575 425 425 425 425 425 425 425 425 425 425 425 425 425 425 425	1 1 1 1 1 1 1 1 2 2 2 2 3 3 275 325 375 425 475 525 575 425 475 525 575 425 475 425 475 475 425	1 1 1 1 1 1 1 1 1 2 2 2 2 3 3 3 275 325 375 425 475 525 575 425 475 525 12 12 12 12 12 16 16 16 20 20 20 3350 1450 1550 1650 1750 1850 1950 2050 2150 2250 2350 2550 2450 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2150 2250 2250 2350 2450	1 1 1 1 1 1 1 1 1 2 2 2 2 3 3 3 3 275 325 375 425 475 525 575 425 475 525 575 12 12 12 12 12 16 16 16 20 20 20 20 3350 1450 1550 1650 1750 1850 1950 2250 2250 2350 2450 2550 2550 1150 1250 1350 1450 1550 1650 1750 1850 1950 2050 2150 2250 2350 2450 2550 2550



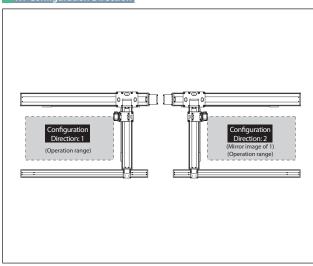
ICSB3-G2J□HS3M XYG+ZS Y Horiz, Gantry Z Slider) X: Lg (400W) Y: Md (200W) Z: Md (200W) X-Y-Z Absolute ICSPB3-G2J□HS3N **High-Precision** Specification ■ Model Specification G2J\BS3M - WA -**T2** K-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option X-axis St Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-2 Length Manag 3L: 3m 5L: 5m Befer to E L: Specified of Model length Designati Series Y-axis - Z-axis Cabl Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Battery-le Absolute XSEL-RA/SA precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-G2J1HS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-G2J2HS3M-①-23-03-07-T2-0-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration *Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-①-400-20-②-T2-⑩-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	_
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-10-⑥-T2-⑩-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for 🛈 through 🗍 in the above model names. Note that the strokes are indicated in mm (millimeters).
- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 120: 1200mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm ? 50: 500mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

<u></u>		
Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- 1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- **1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 **2 When selecting the creep sensor and home limit swirtch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.
 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.
 **A cannot be selected for High-Precision Specification
- *4 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

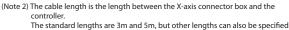
Common Specifications * Items in brackets [] are for the High-Precision Specification.

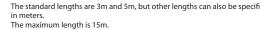
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm





(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated

acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

ICSB3/ICSPB3-G2J□HS3M



■G2J□HS3M

800-1,200 100 14.3 150 13.6 200 13.0 250 12.3 300 11.7 350 11.1	
150 13.6	
200 13.0	
200 13.0 250 12.3	
호 250 12.3	
300 11.7	
š 350 11.1	
400 10.5	
450 9.8	
500 9.2	

Maximum Speed by Stroke (mm/s) (Note 4)

■G2J□HS3M

100~500 800~900		1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	
X-axis —		_	120	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	Y-axis — 1200		200	1100							_						
Z-axis 600																	

ICSB3 [ICSPB3]-G2J□HS3M-CT-CTSC (Cable track - Self-standing cable specification)





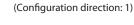
2D CAD

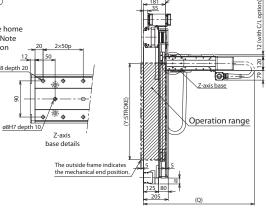


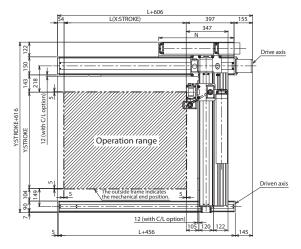


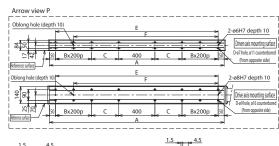
* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to 6-M8 depth 20 IAI for adjustment.

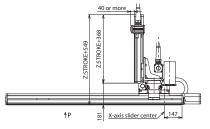








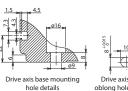






hole details





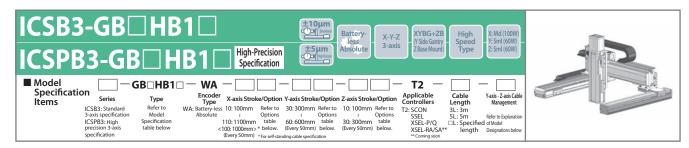


Q dimension

Z-axis stroke	100	150	200	250	300	350	400	450	500
Q	900	950	1000	1050	1100	1150	1200	1250	1300

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
Α	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



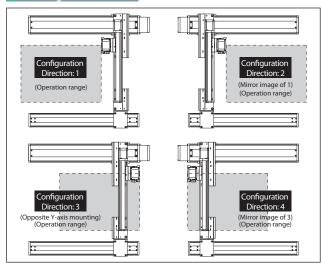


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1 Z-axis speed type *2		Model
1	М	ICSB3[ICSPB3]-GB1HB1M-①-② ③-④ ⑤-⑥-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GB1HB1L-①-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GB2HB1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GB2HB1L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GB3HB1M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GB3HB1L-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GB4HB1M-①-② ③-④ ⑤- ⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GB4HB1L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page		
Name of axis	Wodel	Reference page		
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-20-②-T2-①-③	→ Please contact IAI for more details		
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	_		
Y-axis	ISB[ISPB]-SXM-①-60-16-④-T2-①-⑤	→ Please contact IAI for more details		
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details		

- Refer to the symbols within the table Explanation of Model Designations at the upper right for 1 through 2 in the above model names.

 Note that the strokes are indicated in mm (millimeters).
- Lead is specified with in the above model names. 8: For Z-axis Medium Speed type
- 4: For Z-axis Low Speed type
- * Cable exit direction is specified with 🗓 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	10: 100mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm ? 30: 300mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track					

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification	NM	See P.353		
Guide with ball-retaining mechanism *3	RT	See P.354		

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information
- *3 Cannot be selected for High-Precision Specification.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]				
Positioning repeatability	±0.01mm [±0.005mm]				
Lost motion	0.05mm [0.02mm] or less				
Guide	Integrated with base				
Base	Material: Aluminum with white alumite treatment				
X-axis motor output/lead	100W/20mm				
Y-axis motor output/lead	60W/16mm				
Z-axis motor output/lead	60W/8mm (M), 4mm (L)				

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the



- The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
- (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the
- acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GB□HB1M

		Y-axis stroke										
		300~400	450	500	550	600						
a	100		7.0	7.0	6.6	5.1						
axis stroke	150		7.0	7.0	6.2	4.7						
s st	200	7.0	7.0	7.0	5.8	4.3						
	250		7.0	6.8	5.4	3.9						
-Z	300		6.7	6.5	5.1	3.6						

■GB□HB1L

				Y-axis stroke										
			300	350	400	450	500	550	600					
	a	100	7.6	7.6	7.3	6.9	6.6	6.1	5.8					
	stroke	150	7.2	7.2	6.9	6.5	6.2	5.8	5.5					
	s st	200	6.9	6.9	6.6	6.1	5.8	5.4	5.1					
	-axis	250	6.5	6.5	6.2	5.8	5.5	5.1	4.8					
	Ż	300	6.3	6.2	5.9	5.5	5.2	4.8	4.5					

Maximum Speed by Stroke (mm/s) (Note 4)

■GB□HB1M

	100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100
X-axis		1200		860	695	570	460
Y-axis	_	960			_		
Z-axis	480			_	_		

■GB□HB1L

	100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100
X-axis		1200		860	695	570	460
Y-axis	_	960			_		
Z-axis	240			_	_		

ICSB3 [ICSPB3]-GB□HB1□-SC-SC (Self-standing cable specification)

CAD drawings can be downloaded from our website.

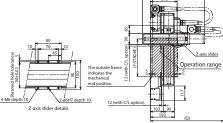


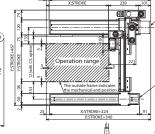




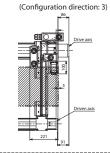
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned

to IAI for adjustment.





(Configuration direction: 1)

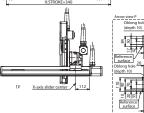




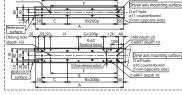
700 750 750 800 800 850 850







(Configuration direction: 1)



X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18

\square -CT-CT (Cable track specification) ICSB3 [ICSPB3]-GB□HB1

CAD drawings can be downloaded from our website.



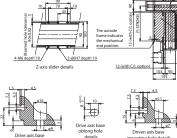


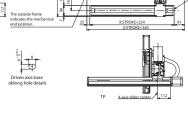


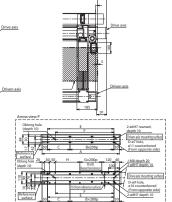
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment











(Configuration direction: 3)

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
Α	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
H	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675



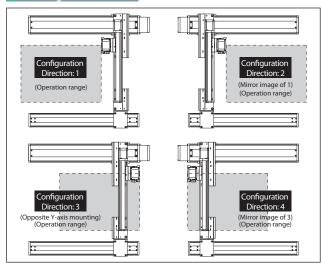
ICSB3-GB□MB1□ ±10µm XYBG+ZB (Y Side Gantry Z Base Mount Battery-less Absolute Medium X: Md (100W X-Y-Z Speed Y: Sml (60W) Z: Sml (60W) ICSPB3-GB□MB High-Precision Specification ■ Model Specification GB MB1 WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-axis Cabin Management 3L: 3m St.: 5m Refer to Explanatio LL: Specified of Model length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below precisio... specificati XSEL-RA/SA⁴

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GB1MB1M-①-23-45-67-T2-8-9
'	L	ICSB3[ICSPB3]-GB1MB1L-①-②③-④⑤-07-T2-⑥-⑨
2	Speed	ICSB3[ICSPB3]-GB2MB1M-①-23-43-67-T2-8-9
2	L	ICSB3[ICSPB3]-GB2MB1L-①-23-05-67-T2-8-9
3	М	ICSB3[ICSPB3]-GB3MB1M-①-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GB3MB1L-①-②③-④⑤-07-T2-⑥-⑨
4	М	ICSB3[ICSPB3]-GB4MB1M-①-23-43-67-T2-8-9
4	L	ICSB3[ICSPB3]-GB4MB1L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-10-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	_
Y-axis	ISB[ISPB]-SXM-①-60-8-④-T2-⑪-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for 1 through 2 in the above model names.

 Note that the strokes are indicated in mm (millimeters).
- * Lead is specified with in the above model names. 8: For Z-axis Medium Speed type
- 4: For Z-axis Low Speed type
- * Cable exit direction is specified with 🗓 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.

 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the mounting position.

 Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/10mm
Y-axis motor output/lead	60W/8mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller The standard lengths are 3m and 5m, but other lengths can also be specified

in meters.

The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The

payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GB□MB1M

Y-axis stroke 100 150 7.0

■GB□MB1L

		Y-axis stroke
		300~600
a	100	
S S	150	
Z-axis stroke	200	14.0
-axi	250	
Z	300	

Maximum Speed by Stroke (mm/s) (Note 4)

■GB□MB1M

	100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100
X-axis		600		430	345	280	230
Y-axis	_	480			_		
Z-axis	480			_	_		

■GB□MB1L

	100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100						
X-axis		600		430	230	280	230						
Y-axis	_	480		=									
Z-axis	240			-	_								

ICSB3 [ICSPB3]-GB□MB1□-SC-SC (Self-standing cable specification)

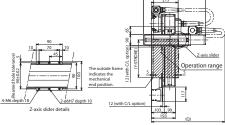
CAD drawings can be downloaded from our website.

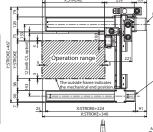




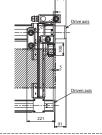


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.





(Configuration direction: 1)

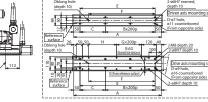


(Configuration direction: 3)









(Configuration direction: 3)

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	- 1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18

700 750 750 800 800 850 850

(Cable track specification) ICSB3 [ICSPB3]-GB□MB1

CAD drawings can be downloaded from our website.



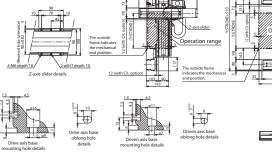


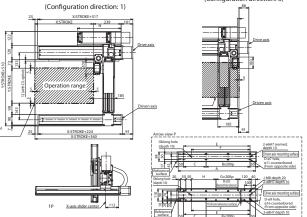


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment









X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
Α	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675



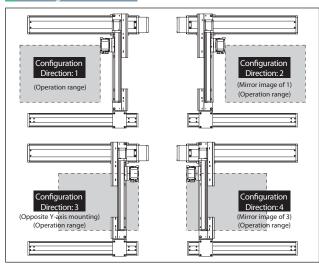
ICSB3-GC□HB1 ±10µm Battery-less Absolute High Speed Type X-Y-Z High-Precision ICSPB3-GC Specification ■ Model Specification GC□HB1□ WA **T2** | Encoder | Y-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Battery-less | 0: 100mm Refer to | 30: 300mm Refer to | 10: 100mm Refer to | 0-100mm Refer Applicable Controllers Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below precision specificati XSEL-RA/SA⁴

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1HB1M-①-② ③-④ ③-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GC1HB1L-①-2③-4⑤-⑥7-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-GC2HB1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GC2HB1L-①-2③-4③-6⑦-T2-⑧-⑨
3	М	ICSB3[ICSPB3]-GC3HB1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
3	L	ICSB3[ICSPB3]-GC3HB1L-①-23-43-67-T2-8-9
4	М	ICSB3[ICSPB3]-GC4HB1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GC4HB1L-①-2③-4⑤-6⑦-T2-⑥-⑨

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-200-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for $\boxed{ \bigcirc }$ through 🗇 in the above model names.
- Note that the strokes are indicated in mm (millimeters).
- * Lead is specified with in the above model names. 8: For Z-axis Medium Speed type
- 4: For Z-axis Low Speed type
- * Cable exit direction is specified with [1] in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 110: 1100mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification	NM	See P.353		
Guide with ball-retaining mechanism *3	RT	See P.354		

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- "2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.
- Please refer to P.11 for more information.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Drive system	Rall screw rolled C10 (equivalent to rolled C5)
Common Specifica	* Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified

in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.



■GC□НВ1М

	СППВ	TIVI							
		Y-axis stroke							
		300~700							
e.	100								
	150								
rok	200								
Z-axis stroke	250	7.0							
-ax	300								
Z	350								
	400								

■GC□HB1L

			Y-axis stroke	
			300~650	700
		100		14.0
	Z-axis stroke	150		14.0
		200		14.0
	s st	250	14.0	14.0
	-axi	300		14.0
	350 400	350		13.9
			13.6	

Maximum Speed by Stroke (mm/s) (Note 4)

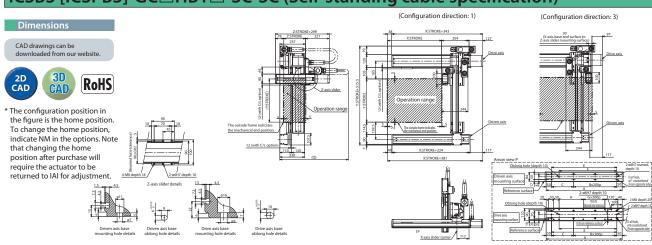
■GC□HB1M

	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis		1200		860	695	570	460
Y-axis	_	12	00		-	-	
Z-axis	48	30			_		

■GC□HB1L

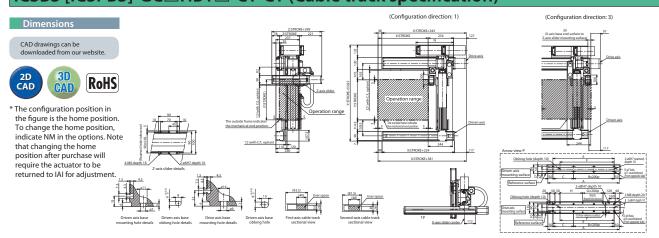
	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100	
X-axis		1200		860	695	460		
Y-axis	_	12	00		-	-		
7-axis	24	10						

ICSB3 [ICSPB3]-GC□HB1□-SC-SC (Self-standing cable specification)



X-axis stroke	100	150	20	00	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	40)4	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	10)4	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	5	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	30)4	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	23	34	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	C)	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	12	24	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	0	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700											
Q	750	750	800	800	850	850	850	900	900											

ICSB3 [ICSPB3]-GC□HB1□-CT-CT (Cable track specification)



X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675



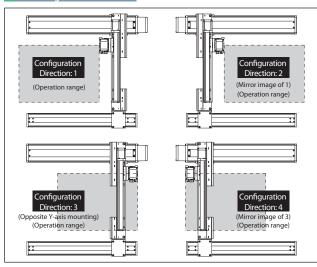
ICSB3-GC□HB2□ ±10µm Battery-less Absolute X: Md (200W) Y: Md (100W) Z: Md (100W) X-Y-Z Speed ICSPB3-GC□HB2 High-Precision Specification ■ Model Specification GC□HB2□ WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-axis Cabin Management 3L: 3m St.: 5m Refer to Explanatio LL: Specified of Model length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below XSEL-RA/SA⁴ precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1HB2M-①-② ③-④ ③-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GC1HB2L-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GC2HB2M-①-②③-④⑤-⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GC2HB2L-①-2③-4⑤-07-T2-⑥-0
3	М	ICSB3[ICSPB3]-GC3HB2M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
3	L	ICSB3[ICSPB3]-GC3HB2L-①-2③-4⑤-⑥7-T2-⑥-⑨
4	М	ICSB3[ICSPB3]-GC4HB2M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GC4HB2L-1]-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-200-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-11-100-101-66-T2-111-77	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- In the above model names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with log in the above model names.

 10: For Z-axis Medium Speed type
- 5: For Z-axis Low Speed type
- * Cable exit direction is specified with 11 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 110: 1100mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- "2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.
- Please refer to P.11 for more information.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.
- Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	100W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified

in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GC□HB2M

		Y-axis stroke														
		300	350	400	450	500	550	600	650	700						
	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0						
a	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0						
stroke	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0						
sst	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.9						
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3						
-Ż	350	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.6						
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0						

■GC□HB2L

					١	'-axis strok	e			
		300	350	400	450	500	550	600	650	700
	100	13.0	13.0	13.0	12.9	12.9	12.9	12.9	12.8	11.8
au	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2
stroke	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6
s st	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9
-axis	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3
Z-	350	10.1	10.1	10.1	10.1	10.0	10.0	10.0	10.0	8.6
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□HB2M

ı		100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
	X-axis		1200		860	695	570	460
	Y-axis	_	12	00		-	-	
I	Z-axis	60	00			_		

■GC□HB2L

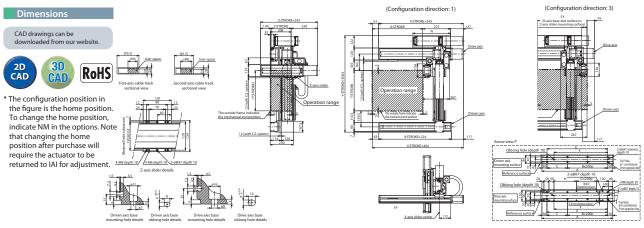
	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis		1200		860	695	570	460
Y-axis	_	12	00		-	-	
7-axis	3(20					

ICSB3 [ICSPB3]-GC□HB2□-SC-SC (Self-standing cable specification)

CAD drawings can be downloaded from our website. 2D GAD ROHS *The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

	mountaing note cetals closing note octals mountaing hose octals cooling note octals.																			
X-axis stroke	100	150	20	00	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Α	304	354	40)4	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	10)4	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	ϵ	5	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	30)4	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	23	34	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	()	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	12	24	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	1	0	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
		[[
Y-axis stroke	300	350	400	450	500	550	600	650	700											
Q	750	800	800	850	850	850	900	900	950											

ICSB3 [ICSPB3]-GC□HB2□-CT-CT (Cable track specification)



X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675



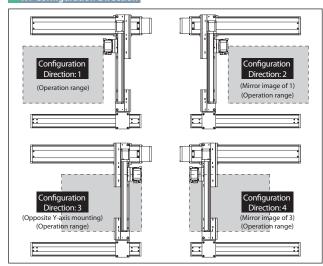
ICSB3-GC□HB3H XYBG+ZB (Y Side Gantry Z Base Mount) X: Md (200W X-Y-Z Y: Md (100W) Z: Md (200W) Absolute Type High-Precision ICSPB3-GC | HB3H High-Precision Specification ■ Model Specification GC_{HB3}H WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op Cable Y-axis - Z-axis Cabin Management 3L: 3m St.: 5m Refer to Explanatio LL: Specified of Model length Designations below Applicable Controllers Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below XSEL-RA/SA⁴ precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	Н	ICSB3[ICSPB3]-GC1HB3H-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	Н	ICSB3[ICSPB3]-GC2HB3H-①-23-45-67-T2-8-9
3	Н	ICSB3[ICSPB3]-GC3HB3H-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
4	Н	ICSB3[ICSPB3]-GC4HB3H-①-23-05-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 1 through 9 in the model names above

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-200-20-2-T23	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-20-⑥-T2-⑩-⑦	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	10: 100mm 110: 1100mm (100: 1000mm) *1					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm ¹ 70: 700mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track					

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification	NM	See P.353		
Guide with ball-retaining mechanism *3	RT	See P.354		

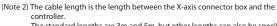
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]			
Positioning repeatability	±0.01mm [±0.005mm]			
Lost motion	0.05mm [0.02mm] or less			
Guide	Integrated with base			
Base	Material: Aluminum with white alumite treatment			
X-axis motor output/lead	200W/20mm			
Y-axis motor output/lead	100W/20mm			
Z-axis motor output/lead	200W/20mm			

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.



(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

^{*} Cable exit direction is specified with log in the above model names. Please refer to P.11 for the exit directions.

^{*1} Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position

Please refer to P.11 for more information

Prease refer to P.11 for the emination.

*To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

Please refer to P.11 for the cable exit direction of each axis.



■GC□НВ3Н

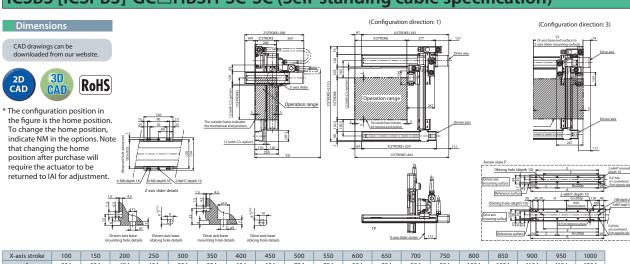
				Y-axis stroke									
		300	350	400	450	500	550	600	650	700			
	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0			
a	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0			
stroke	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0			
s st	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3			
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.7			
-Z	350	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.5	8.1			
	400	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0	7.5			

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□HB3H

	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis		1200		860	695	570	460
Y-axis	_	12	00		-	-	
Z-axis	12	00			_		

ICSB3 [ICSPB3]-GC□HB3H-SC-SC (Self-standing cable specification)



X-axis stroke	100	150	200		250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
V-qxi2 200KG				_																
A	304	354	404		454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1		1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104		154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6		6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304		354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234		284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0		0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124		174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10		10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700											
Q	750	800	800	850	850	850	900	900	950											

ICSB3 [ICSPB3]-GC□HB3H-CT-CT (Cable track specification)

CAD drawings can be downloaded from our website. * The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. **Last sider details born more position after purchase will require the actuator to be returned to IAI for adjustment.

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675



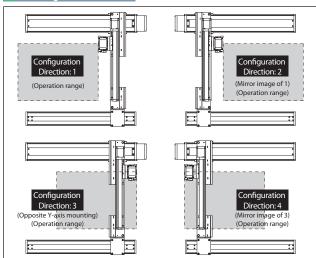
ICSB3-GC□MB2L ±10µm Battery-less Absolute XYBG+ZB (Y Side Gantry Z Base Mount Medium X: Md (100W X-Y-Z Speed Type Y: Md (100W) Z: Md (100W) High-Precision ICSPB3-GC□MB2 Specification ■ Model Specification GC□MB2L WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op Cable Y-axis - Z-axis Cabin Management 3L: 3m St.: 5m Refer to Explanatio LL: Specified of Model length Designations below Applicable Controllers Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below XSEL-RA/SA⁴ precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GC1MB2L-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GC2MB2L-①-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GC3MB2L-①-23-05-67-T2-8-9
4	L	ICSB3[ICSPB3]-GC4MB2L-①-② ③-④ ⑤ ⑦-T2-⑥-⑨

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗓 through 📵 in the model names above.

XY Configuration Direction



Axis Configuration *Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-10-②-T2-⑩-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-10-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-100-5-⑥-T2-⑩-⑦	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	10: 100mm 2 110: 1100mm (100: 1000mm) *1					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm					
(5)	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track					

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

menselecting manapic options, specify them in appropriate.												
Туре	Model	Reference page										
X-axis cable exit direction	*	See P.11, P.353										
AQ seal (standard equipment)	AQ	See P.353										
Brake (equipped as standard on Z-axis) *1	В	See P.353										
Creep sensor *2	C/CL	See P.353										
Home limit switch *2	L/LL	See P.353										
Non-motor end specification	NM	See P.353										
Guide with ball-retaining mechanism *3	RT	See P.354										

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/10mm
Y-axis motor output/lead	100W/10mm
Z-axis motor output/lead	100W/5mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller.

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

^{*} Cable exit direction is specified with limit the above model names. Please refer to P.11 for the exit directions.

^{*1} Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.

Please refer to P.11 for more information.

^{*3} Cannot be selected for High-Precision Specification.

*To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

■GC□MB2L

			Y-axis stroke														
		300	350	400	450	500	550	600	650	700							
	100	17.6	17.2	16.8	16.5	16.1	15.5	14.9	13.9	11.8							
a	150	17.0	16.6	16.2	15.9	15.5	14.9	14.4	13.3	11.2							
stroke	200	16.4	16.0	15.6	15.3	14.9	14.4	13.8	12.7	10.6							
s st	250	15.7	15.3	14.9	14.6	14.2	13.8	13.2	12.0	9.9							
-axis	300	15.1	14.7	14.3	14.0	13.6	13.2	12.7	11.4	9.3							
-Z	350	14.4	14.0	13.6	13.3	12.9	12.5	12.0	10.7	8.6							
	400	13.8	13.4	13.0	12.7	12.3	11.9	11.5	10.1	8.0							

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□MB2L

	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis		600		430	345	280	230
Y-axis	_	60	00		-	_	
7-axis	30	00		•			

ICSB3 [ICSPB3]-GC□MB2L-SC-SC (Self-standing cable specification)

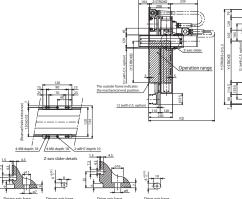


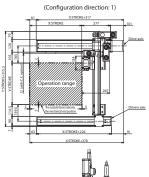


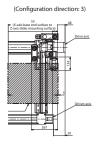


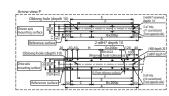


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.









			Driven as mounting h		Driven axis base along hole details	Drive	axis base g hole details	Drive axis ba				1P	X-axis slider cente			mounting surf	SIRIWI Serence surface		10 From reference surface) E B×200p A
X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
F	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104

A	304	354	404		454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1		1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	104		154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6		6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304		354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234		284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0		0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124		174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10		10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700											
Q	750	800	800	850	850	850	900	900	950											

ICSB3 [ICSPB3]-GC□MB2L-CT-CT (Cable track specification)

Dimensions

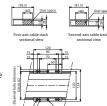
CAD drawings can be downloaded from our website.

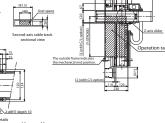


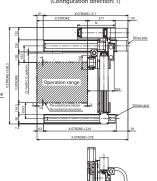


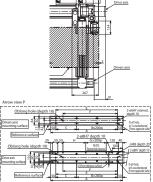


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.









(Configuration direction: 3)

Driven axis base mounting hole details	Driven axis base oblong hole details	Drive axis base mounting hole details	Drive axis base oblong hole details

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675



ICSB3-GC□MB3M High-Precision ICSPB3-GC□MB3 Specification





T2

Medium Speed Type

X: Md (100W Y: Md (100W) Z: Md (200W)

■ Model Specification

Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis precision : specificati

Туре Refer to Model Specification table below

GC MB3M

WA Encoder Type

X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op

Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA⁴ Cable Y-axis - Z-axis Cabin Management
3L: 3m St.: 5m Refer to Explanatio

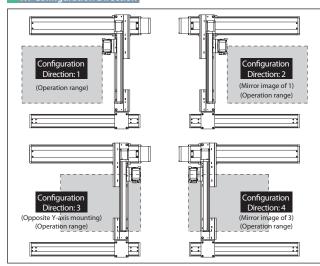
LL: Specified of Model
length Designations belor

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	М	ICSB3[ICSPB3]-GC1MB3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	M	ICSB3[ICSPB3]-GC2MB3M-①-②③-④ ⑤-⑥⑦-T2-⑥-⑨
3	M	ICSB3[ICSPB3]-GC3MB3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
4	M	ICSB3[ICSPB3]-GC4MB3M-11-23-43-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-100-10-2-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-10-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-10-⑥-T2-⑩-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).
- * Cable exit direction is specified with 100 in the above model names.

 Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	10: 100mm 110: 1100mm (100: 1000mm) *1					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track					

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Titles selecting manapic options, specin, them in alph	abetical oraci.			
Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification	NM	See P.353		
Guide with ball-retaining mechanism *3	RT	See P.354		

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.

 Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

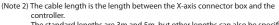
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]					
Positioning repeatability	±0.01mm [±0.005mm]					
Lost motion	0.05mm [0.02mm] or less					
Guide	Integrated with base					
Base	Material: Aluminum with white alumite treatment					
X-axis motor output/lead	100W/10mm					
Y-axis motor output/lead	100W/10mm					
Z-axis motor output/lead	200W/10mm					

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated

acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GC□MB3M

			Y-axis stroke											
		300	350	400	450	500	550	600	650	700				
	100	17.1	16.7	16.3	16.0	15.6	15.0	14.5	13.4	11.3				
Z	150	16.4	16.0	15.6	15.3	14.9	14.4	13.8	12.7	10.6				
-axis	200	15.8	15.4	15.0	14.7	14.3	13.9	13.3	12.1	10.0				
is st	250	15.1	14.7	14.3	14.0	13.6	13.2	12.7	11.4	9.3				
stroke	300	14.5	14.1	13.7	13.4	13.0	12.6	12.1	10.8	8.7				
Ф	350	13.9	13.5	13.1	12.8	12.4	12.0	11.6	10.2	8.1				
	400	13.3	12.9	12.5	12.2	11.8	11.4	11.0	9.6	7.5				

Maximum Speed by Stroke (mm/s) (Note 4)

RoHS

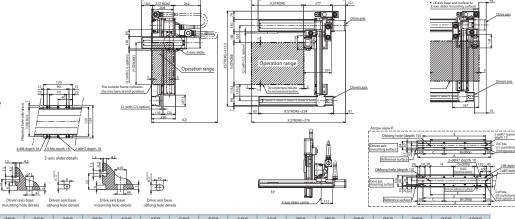
■GC□МВ3М

ı		100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100		
ı	X-axis		600		430	345	280	230		
ı	Y-axis	_	60	00	_					
ı	7-avis	60	20							

ICSB3 [ICSPB3]-GC□MB3M-SC-SC (Self-standing cable specification)

(Configuration direction: 3) Dimensions CAD drawings can be downloaded from our website.

* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



X-axis stroke	100	150	20	0	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	40	4	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1		1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	10	4	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6		6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	30	4	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	23	4	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0		0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	12	4	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10)	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700											
Q	750	800	800	850	850	850	900	900	950											

\square MB3M-CT-CT (Cable track specification) ICSB3 [ICSPB3]-GC

CAD drawings can be downloaded from our website.

Dimensions

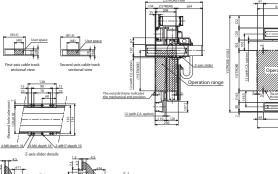


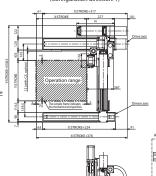


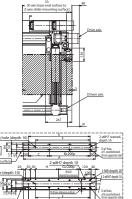




* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.







(Configuration direction: 3)

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675



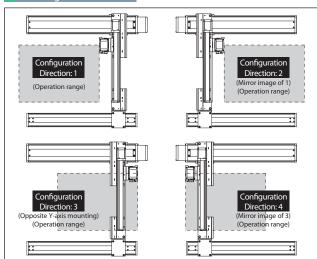
ICSB3-GD□HB1 ±10µm Battery-less Absolute XYB+ZB (Y Side Gantry Z Base Mount (: Md (200W X-Y-Z Speed ong Type High-Precision ICSPB3-GD Specification ■ Model Specification GD□HB1□ WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Delay Baltery-less 80:800mm Refer to 30:300mm Refer to 10:100mm Refer to 10:00mm Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Zaxis Cabu Length Management 3L: 3m 5L: 5m Refer to Explanatio IL: Specified of Model length Designations belor Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Bat XSEL-RA/SA precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GD1HB1M-①-② 3-40 3-60 72-T2-8-9
'	L	ICSB3[ICSPB3]-GD1HB1L-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GD2HB1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GD2HB1L-①-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GD3HB1M-①-②③-④⑤-⑦-T2-⑧-⑨
3	L	ICSB3[ICSPB3]-GD3HB1L-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GD4HB1M-①-②③-④⑤-⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GD4HB1L-1]-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-1-200-20-2-T2-1-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- in the above mode names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with 100 in the above model names.

 8: For Z-axis Medium Speed type

 4: For Z-axis Low Speed type

- * Cable exit direction is specified with 11 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	80: 800mm 200: 2000mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm					
(5)	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track					

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.

 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.

 Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the



- controller.
 The standard lengths are 3m and 5m, but other lengths can also be specified
 - in meters. The maximum length is 15m.
- (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.
- (Note 4) Please note that a longer stroke will result in a lower max speed.



■GD□HB1M

Y-axis stroke 100 150 Z-axis stroke 200 250 300 350 7.0

■GD□HB1L

			Y-axis stroke	
			300~650	700
		100		14.0
	a	150		14.0
	Š	200		14.0
	Z-axis stroke	250	14.0	14.0
	-axi	300		14.0
	Z	350		13.9
		400		13.6

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HB1M

ĺ		100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
	X-axis				1200	1100	1000	950	800	700	600	550	500	450
	Y-axis	— 1200						_						
ı	Z-axis	480						_						

■GD□HB1L

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis			1200	1100	1000	950	800	700	600	550	500	450	
Y-axis	_	1200						_					
Z-axis	240							_					

ICSB3 [ICSPB3]-GD□HB1□-CT-CT (Cable track specification)

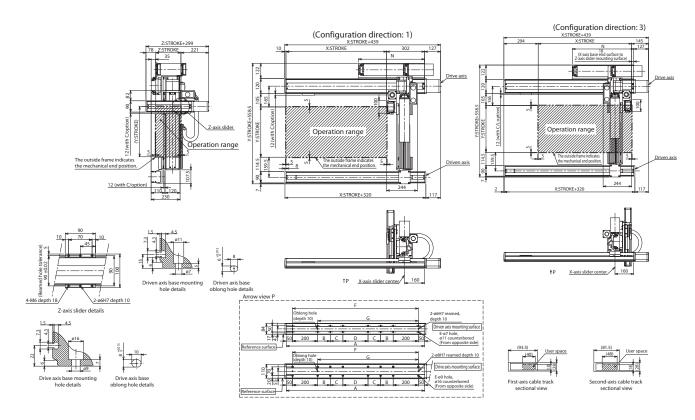
Dimensions





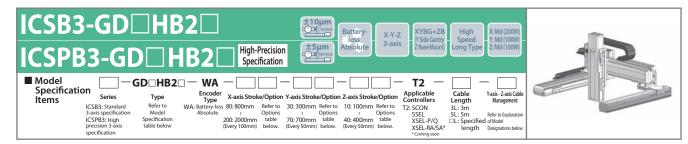


* The configuration position in the figure is the home position.
To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
С	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125



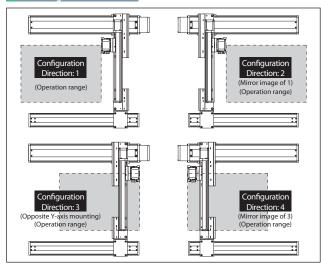


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GD1HB2M-①-② ③-④ ③-⑥ ②-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GD1HB2L-①-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GD2HB2M-①-②③-④⑤-⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GD2HB2L-①-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GD3HB2M-①-②③-④⑤-⑦-T2-⑧-⑨
3	L	ICSB3[ICSPB3]-GD3HB2L-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GD4HB2M-①-②③-④⑤-⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GD4HB2L-①-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-10-200-20-20-172-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-100-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- In the above mode names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with [iii] in the above model names.

 10: For Z-axis Medium Speed type

 5: For Z-axis Low Speed type

- Cable exit direction is specified with [1] in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	80: 800mm 200: 2000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.

 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	100W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller.

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GD□HB2M

_														
			Y-axis stroke											
		300	350	400	450	500	550	600	650	700				
	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
a	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
stroke	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
sst	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.9				
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3				
Ż	350	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.6				
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0				

■GD□HB2L

					١	'-axis strok	e			
		300	350	400	450	500	550	600	650	700
	100	13.0	13.0	13.0	12.9	12.9	12.9	12.9	12.8	11.8
a	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2
stroke	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6
	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9
-axis	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3
Ż.	350	10.1	10.1	10.1	10.1	10.0	10.0	10.0	10.0	8.6
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HB2M

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis		_		1200	1100	1000	950	800	700	600	550	500	450
Y-axis	_	— 1200						_					
7-axis	60	600						_					

■GD□HB2L

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis	_			1200	1100	1000	950	800	700	600	550	500	450
Y-axis	— 1200						_						
7-axis	3(20						_					

ICSB3 [ICSPB3]-GD□HB2□-CT-CT (Cable track specification)

Dimensions

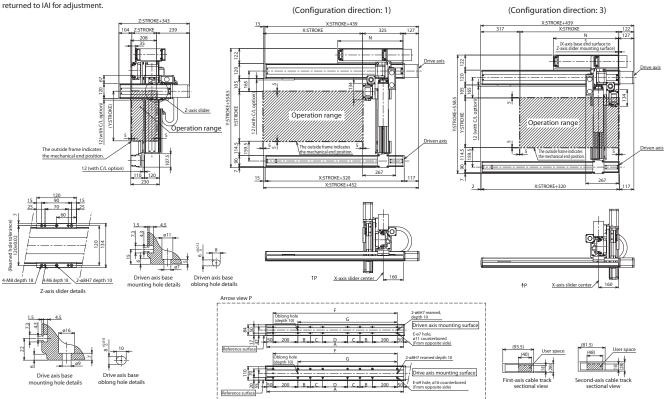
CAD drawings can be downloaded from our website.







* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
C	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125



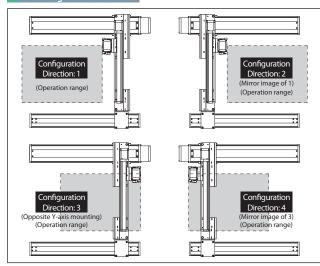
ICSB3-GD□HB3H XYBG+ZB (Y Side Gantry Z Base Mount) Battery-less Absolute High Speed Long Type X: Md (200W X-Y-Z Y: Md (100W) Z: Md (200W) High-Precision ICSPB3-GD Specification ■ Model Specification **GD** HB3H WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Description Battery-less 80:800mm Refer to 30:300mm Refer to 10:100mm Refer to Absolute Options 1 Options 1 Options 10:400mm table 200:2000mm table below. (Every 50mm) below. (Every 50mm) below. Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-axis Cabil Length Management 3L: 3m 5L: 5m Refer to Explanation LL: Specified of Model Length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Bat XSEL-RA/SA precisio... specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	Н	ICSB3[ICSPB3]-GD1HB3H-①-23-43-67-T2-8-9
2	Н	ICSB3[ICSPB3]-GD2HB3H-①-23-43-67-T2-8-9
3	Н	ICSB3[ICSPB3]-GD3HB3H-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
4	Н	ICSB3[ICSPB3]-GD4HB3H-①-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 1 through 9 in the model names above

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-11-200-20-22-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-20-6-T2-10-7	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	80: 800mm 200: 2000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	200W/20mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller

The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.

When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

In the above model names.

Note that the strokes are indicated in mm (millimeters).

Cable exit direction is specified with in the above model names.

Please refer to P.11 for the exit directions.

^{*}I Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.

*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the mounting position.

Please refer to P.11 for more information.

^{*3} Cannot be selected for High-Precision Specification.

^{*} To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.



■GD□HB3H

					١	/-axis strok	e			
		300	350	400	450	500	550	600	650	700
	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
a	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
stroke	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
s st	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.7
-Z	350	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.5	8.1
	400	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0	7.5

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HB3H

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis		_		1200	1100	1000	950	800	700	600	550	500	450
Y-axis	_	— 1200						_					
Z-axis	1200						_						

ICSB3 [ICSPB3]-GD□HB3H-CT-CT (Cable track specification)

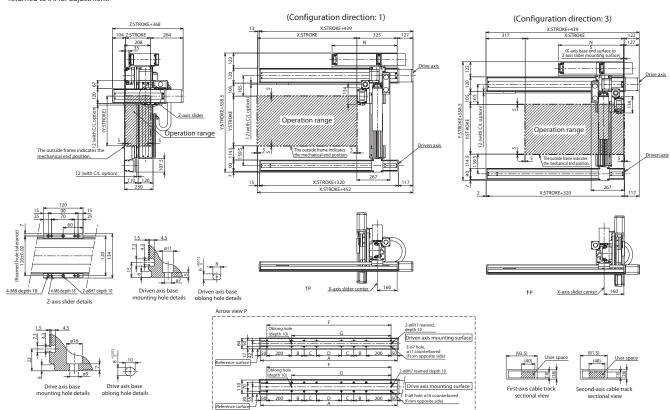
Dimensions







* The configuration position in the figure is the home position.
To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
С	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125



ICSB3-GE□HB1L Battery-less Absolute XYBG+ZB (Y Side Gantry Z Base Mount) X: Lg (400W) Y: Md (200W) Z: Sml (60W) X-Y-Z Speed Type High-Precision **ICSPB3-GE** Specification ■ Model Specification GE□HB1L WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-axis Cabin Management 3L: 3m St.: 5m Refer to Explanatio LL: Specified of Model length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Bat

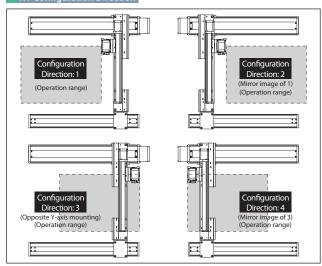
Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GE1HB1L-①-②③-④⑤-⑥7-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GE2HB1L-①-②③-④⑤-⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GE3HB1L-①-②③-④⑤-⑥7-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GE4HB1L-1]-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 1 through 9 in the model names above

XY Configuration Direction

precision : specificati



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-⑩-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-4-⑩-⑥-T2-⑩-⑦	→ Please contact IAI for more details

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

*Cable exit direction is specified with ⑩ in the above model names.

*Please refer to P.11 for the exit directions.

Explanation of Model Designations

XSEL-RA/SA⁴

No.	Description	Notation						
1	Encoder type	WA: Battery-less Absolute						
2	X-axis stroke (Note 1)	10: 100mm						
3	X-axis option	Refer to Options table below.						
4	Y-axis stroke (Note 1)	30: 300mm						
5	Y-axis option	Refer to Options table below.						
6	Z-axis stroke (Note 1)	10: 100mm ? 50: 500mm						
7	Z-axis option	Refer to Options table below.						
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m						
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track						

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

<u></u>								
Model	Reference page							
*	See P.11, P.353							
AQ	See P.353							
В	See P.353							
C/CL	See P.353							
L/LL	See P.353							
NM	See P.353							
RT	See P.354							
	* AQ B C/CL L/LL NM							

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.
- 3 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

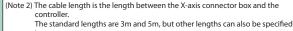
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]						
Positioning repeatability	±0.01mm [±0.005mm]						
Lost motion	0.05mm [0.02mm] or less						
Guide	Integrated with base						
Base	Material: Aluminum with white alumite treatment						
X-axis motor output/lead	400W/20mm						
Y-axis motor output/lead	200W/20mm						
Z-axis motor output/lead	60W/4mm						

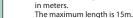
Applicable Controllers

Notes

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).





(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

■GE□HB1L

		Y-axis stroke
		300~900
	100	
	150	
a	200	
Z-axis stroke	Ž 250	
sst	300	14.0
-axi	350	
Z	400	
	450	
	500	

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□HB1L

	100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300
X-axis		12	00		920	765	645	550	440
Y-axis	_	12	00	860	695		_	_	
7-axis	24	10							

ICSB3 [ICSPB3]-GE□HB1L-SC-SC (Self-standing cable specification)



CAD drawings can be downloaded from our website

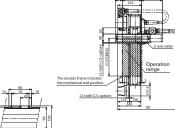


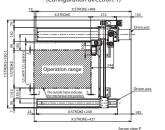


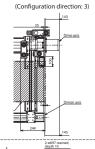


The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment

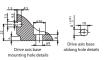




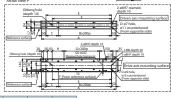












X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	- 1	- 1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700	750	800	850	900						
Q	700	800	800	800	850	850	900	900	950	950	1000	1000	1000						

ICSB3 [ICSPB3]-GE \square HB1L-CT-CT (Cable track specification)

Dimensions

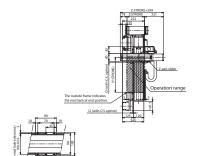
CAD drawings can be downloaded from our website.

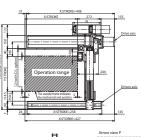


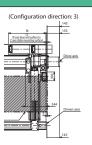


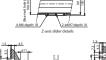


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

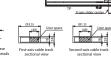


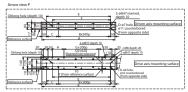












X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538
В	0	0	1	- 1	- 1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	700	725	750	775



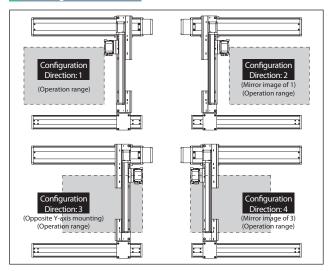
ICSB3-GE□HB2□ Battery-less Absolute XYBG+ZB (Y Side Gantry Z Base Mount) X: Lg (400W) Y: Md (200W) Z: Md (100W) X-Y-Z Speed High-Precision ICSPB3-GE□HB2 Specification ■ Model Specification GE□HB2□ WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-axis Cabin Management 3L: 3m St.: 5m Refer to Explanatio LL: Specified of Model length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Bat XSEL-RA/SA⁴ precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1HB2M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
'	L	ICSB3[ICSPB3]-GE1HB2L-①-②③-4⑤-⑥⑦-T2-⑧-⑨
2	М	ICSB3[ICSPB3]-GE2HB2M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GE2HB2L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3HB2M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GE3HB2L-①-②③-④⑤-⑥7-T2-⑧-⑨
4	М	ICSB3[ICSPB3]-GE4HB2M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GE4HB2L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
- *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-100-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with ⑩ in the above model names.

 10: For Z-axis Medium Speed type

- 5: For Z-axis Low Speed type
- *Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation						
1	Encoder type	WA: Battery-less Absolute						
2	X-axis stroke (Note 1)	10: 100mm 130: 1300mm (100: 1000mm) *1						
3	X-axis option	Refer to Options table below.						
4	Y-axis stroke (Note 1)	30: 300mm						
(5)	Y-axis option	Refer to Options table below.						
6	Z-axis stroke (Note 1)	10: 100mm						
7	Z-axis option	Refer to Options table below.						
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m						
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track						

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the mounting position.

 Please refer to P.11 for more information.
- *3 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

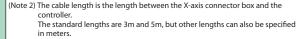
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.



■GE□HB2M

		Y-axis stroke
		300~900
	100	
	150	
é	200	
2	250	
s S1	300	10.0
Z-axis stroke	350	
Z-	400	
	450	
	500	

■GE□HB2L

			Y-axis str	oke		
		300~700	750	800	850	900
	100		20.0	20.0	18.9	16.8
	150		20.0	20.0	18.3	16.2
â	200		20.0	20.0	17.7	15.6
stroke	250		20.0	19.4	17.0	14.9
	300	20.0	20.0	18.8	16.4	14.3
axis	350		20.0	18.1	15.7	13.6
Z,	400	1 i	20.0	17.5	15.1	13.0
	450		19.4	16.9	14.5	12.4
	500		18.8	16.3	13.9	11.8

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□HB2M

	100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300		
X-axis		12	00		920	765	645	550	440		
Y-axis	_	12	00	860	695	_					
Z-axis	60	00				_					

■GE□HB2L

	100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300		
X-axis		12	00		920	765	550	440			
Y-axis	_	12	00	860	695	_					
Z-axis	30	00				_					

ICSB3 [ICSPB3]-GE□HB2□-SC-SC (Self-standing cable specification)

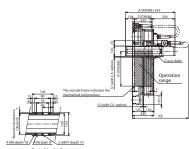
Dimensions

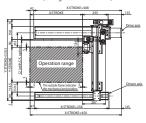
CAD drawings can be downloaded from our website.

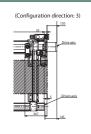




* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



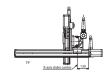


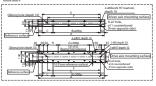












X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	050	700	/50	800	850	900	950	1000
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700	750	800	850	900						
Q	800	800	800	850	850	900	900	950	950	1000	1000	1000	1050						

ICSB3 [ICSPB3]-GE□HB2□-CT-CT (Cable track specification)

Dimensions

CAD drawings can be downloaded from our website.





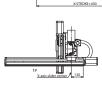


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

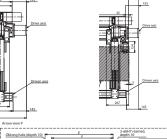








(Configuration direction: 1)



(Configuration direction: 3)

Oblong hole (depth 10)	F 3	2-e6H7 reamed, depth 10
2 24 - 12		D-e7 hole, Driven axis mounting surface
≓G / Iso c	Bx200p	(From opposite side)
Reference surface	A 2-e8H7 depth 10	<u> </u>
20 50 50 Oblong hole (depth 10)	H Gx200p \150 120 ±0.02 \110 (Reamed hole tolerance) \110	35 J-M8 depth 20 2-e8H7 depth 10
8 8 8	- Y	Drive axis mounting surfac
21/21/1	10 (From reference surface)	a16 counterbored (From opposite side)
Reference surface 50 C	Bx200p	50
		

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
Α	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538
В	0	0	1	- 1	- 1	- 1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	700	725	750	775



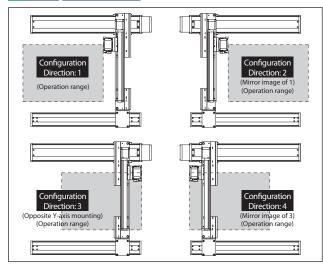
ICSB3-GE□HB3 Battery-less Absolute XYBG+ZB (Y Side Gantry Z Base Mount) X: Lg (400W) Y: Md (200W) Z: Md (200W) X-Y-Z Speed High-Precision ICSPB3-GE Specification ■ Model Specification GE□HB3□ WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option D-axis Stroke/Op Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-axis Cabin Management 3L: 3m St.: 5m Refer to Explanatio LL: Specified of Model length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Bat XSEL-RA/SA precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-GE1HB3H-①-②③-④⑤-6⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-GE1HB3M-①-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-GE1HB3L-①-②3-405-607-T2-80-9
	Н	ICSB3[ICSPB3]-GE2HB3H-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GE2HB3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GE2HB3L-①-②③-④⑤-⑥7-T2-⑧-⑨
	Н	ICSB3[ICSPB3]-GE3HB3H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
3	М	ICSB3[ICSPB3]-GE3HB3M-①-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-GE3HB3L-①-② 3]-4 5]-6 7]-T2-8]-9
	Н	ICSB3[ICSPB3]-GE4HB3H-1]-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GE4HB3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
	L	ICSB3[ICSPB3]-GE4HB3L-1]-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
*2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM①-200-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

*Lead is specified with [③ in the above model names.

20: For Z-axis High Speed type

25. For Z-axis Medium Speed type
5. For Z-axis Low Speed type
Cable exit direction is specified with 11 in the above model names.
Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	10: 100mm 130: 1300mm (100: 1000mm) *1							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	30: 300mm ? 90: 900mm							
5	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm 50: 500mm							
7	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track							

^{*1} The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm (H), 10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller.

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

^{*1} Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position Please refer to P.11 for more information.

^{*3} Cannot be selected for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.



■GE□HB3H

Z-axis stroke 10.0

■GE□HB3M

	_	Y-axis stroke											
		300~700	750	800	850	900							
	100		20.0	20.0	18.4	16.3							
	150		20.0	20.0	17.7	15.6							
š	200		20.0	19.5	17.1	15.0							
Z-axis stroke	250		20.0	18.8	16.4	14.3							
SS	300	20.0	20.0	18.2	15.8	13.7							
a i	350		20.0	17.6	15.2	13.1							
Ź	400		19.5	17.0	14.6	12.5							
	450		18.8	16.3	13.9	11.8							
	500		18.2	15.7	13.3	11.2							

■GE□HB3H

		100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300
	X-axis		12	00		920	765	645	550	440
ı	Y-axis	_	12	00	860	695		-	_	
ı	Z-axis	12	00				_			
ľ										

■GE□HB3M

Maximum Speed by Stroke (mm/s) (Note 4)

		100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300
	X-axis		12	00		920	765	645	550	440
П	Y-axis	_	12	00	860	695		-		
П	Z-axis	60	00				_			

■CE□UD3I

	GLL	IIIDJL								
		100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300
-[X-axis		12	00		920	765	645	550	440
-[Y-axis	_	12	00	860	695		_		
- [7 avic	20	00							

■GE□HB3L

	_					Y-axis stroke										
		300	350	400	450	500	550	600	650	700	750	800	850	900		
	100	31.8	31.4	31.1	30.7	30.3	29.9	29.5	29.1	26.1	23.3	20.8	18.4	16.3		
	150	31.1	30.7	30.4	30.0	29.6	29.2	28.8	28.4	25.4	22.6	20.1	17.7	15.6		
e e	200	30.5	30.1	29.8	29.4	29.0	28.6	28.2	27.8	24.8	22.0	19.5	17.1	15.0		
stroke	250	29.8	29.4	29.1	28.7	28.3	27.9	27.5	27.1	24.1	21.3	18.8	16.4	14.3		
S	300	29.2	28.8	28.5	28.1	27.7	27.3	26.9	26.5	23.5	20.7	18.2	15.8	13.7		
axis	350	28.6	28.2	27.9	27.5	27.1	26.7	26.3	25.9	22.9	20.1	17.6	15.2	13.1		
-Z	400	28.0	27.6	27.3	26.9	26.5	26.1	25.7	25.3	22.3	19.5	17.0	14.6	12.5		
	450	27.3	26.9	26.6	26.2	25.8	25.4	25.0	24.6	21.6	18.8	16.3	13.9	11.8		
	500	26.7	26.3	26.0	25.6	25.2	24.8	24.4	24.0	21.0	18.2	15.7	13.3	11.2		

ICSB3 [ICSPB3]-GE□HB3□-SC-SC (Self-standing cable specification)

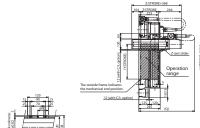
Dimensions

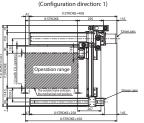
CAD drawings can be

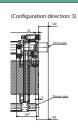


RoHS

The configuration position in the figure is the home position.
To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment





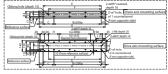












X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	1	1	- 1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700	750	800	850	900						
Q	800	800	800	850	850	900	900	950	950	1000	1000	1000	1050						

(Cable track specification) ICSB3 [ICSPB3]-GE□HB3[

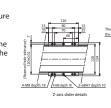
Dimensions

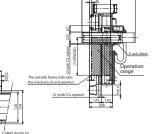


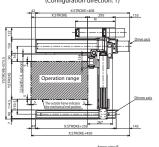


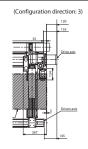
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.









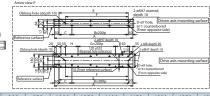












				mounting no	oie details (1:1) oblong	hole details	mou	nting hole de	tails (1:1)	oblong h	ole details					L								;
X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
Α	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538
В	0	0	- 1	1	1	- 1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	700	725	750	775



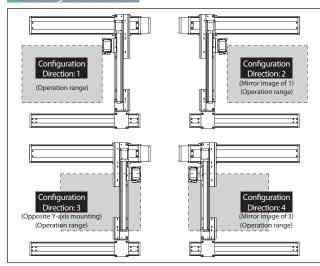
ICSB3-GF□HB1L XYBG+ZB (Y Side Gantry Z Base Mount) Battery-less Absolute X-Y-Z High-Precision ICSPB3-GF Specification ■ Model Specification Items GF□HB1L WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Datery-less 100: 1000mm Refer to 30: 300mm Refer to 10: 100mm Refer to Absolute 0.0ptions Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Zaxis Cabu Length Management 3L: 3m 5L: 5m Refer to Explanatio CL: Specified of Model length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Battery-le Absolute XSEL-RA/SA precisio... specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GF1HB1L-①-②③-④⑤-f2-⑥-⑨
2	L	ICSB3[ICSPB3]-GF2HB1L-①-②③-④⑤-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GF3HB1L-①-②③-④⑤-⑥⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GF4HB1L-①-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 1 through 9 in the model names above

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-⑩-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-4-⑥-T2-⑩-⑦	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

*Cable exit (frection is specified with ⑩ in the above model names.

Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	100: 1000mm							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	30: 300mm ? 90: 900mm							
5	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm ? 50: 500mm							
7	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	nt CT-CT: Cable track - Cable track							

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page			
X-axis cable exit direction	*	See P.11, P.353			
AQ seal (standard equipment)	AQ	See P.353			
Brake (equipped as standard on Z-axis) *1	В	See P.353			
Creep sensor *2	C/CL	See P.353			
Home limit switch *2	L/LL	See P.353			
Non-motor end specification	NM	See P.353			
Guide with ball-retaining mechanism *3	RT	See P.354			

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information
- *3 Cannot be selected for High-Precision Specification.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

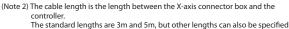
Common Specifications * Items in brackets [] are for the High-Precision Specification.

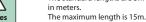
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]							
Positioning repeatability	±0.01mm [±0.005mm]							
Lost motion	0.05mm [0.02mm] or less							
Guide	Integrated with base							
Base	Material: Aluminum with white alumite treatment							
X-axis motor output/lead	400W/20mm							
Y-axis motor output/lead	200W/20mm							
Z-axis motor output/lead	60W/4mm							

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).





(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.



■GF□HB1L

		Y-axis stroke
		300~900
	100	
	150	
۵	200	
창	250	
Z-axis stroke	300	14.0
-a×	350	
7	400	
	450	
	500	

Maximum Speed by Stroke (mm/s) (Note 4)

■GF□HB1L

	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis							1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	— 1200		860	695							_							
Z-axis	240									_									

ICSB3 [ICSPB3]-GF□HB1L-CT-CT (Cable track specification)

Dimensions

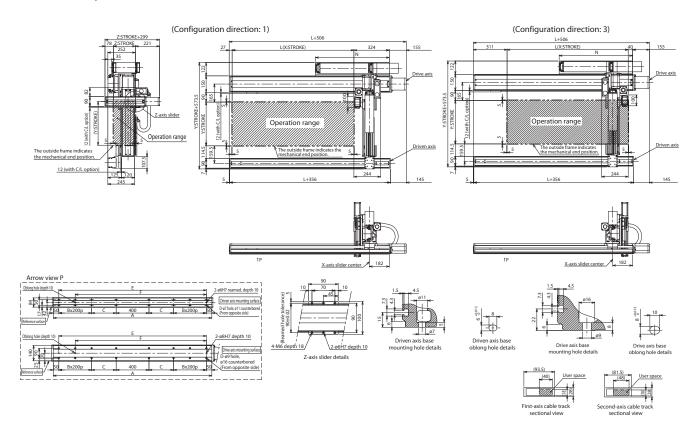
CAD drawings can be downloaded from our website.







* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3
С	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



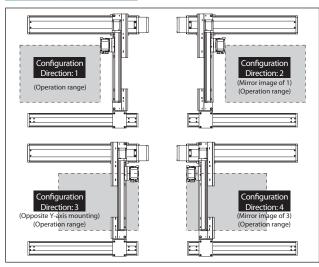
ICSB3-GF□HB2□ ±10µm XYBG+ZB (Y Side Gantry Z Base Mount Battery-less Absolute X: Lg (400W) Y: Md (200W) Z: Md (100W) High X-Y-Z **High-Precision** ICSPB3-GF□HB2 Specification ■ Model Specification GF□HB2□ WA **T2** Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Zaxis Cabu Length Management 3L: 3m 5L: 5m Refer to Explanatio IL: Specified of Model length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Battery-le Absolute XSEL-RA/SA precisio... specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GF1HB2M-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GF1HB2L-①-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GF2HB2M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GF2HB2L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GF3HB2M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GF3HB2L-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GF4HB2M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GF4HB2L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-100-16-T2-11-7	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with [⑩] in the above model names.

 10: For Z-axis Medium Speed type
- 5: For Z-axis Low Speed type
- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm ¿ 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The ontion codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
- Please refer to P.11 for more information
- *3 Cannot be selected for High-Precision Specification.

 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

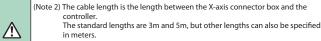
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.



■GF□HB2M

Y-axis stroke 100 150 200 Z-axis stroke 250 300 350 10.0 400 450

■GF□HB2L

	_		T-dXIS SUOKE												
		300~700	750	800	850	900									
	100		20.0	20.0	18.9	16.8									
	150		20.0	20.0	18.3	16.2									
ص ا	200		20.0	20.0	17.7	15.6									
stroke	250		20.0	19.4	17.0	14.9									
sst	300	20.0	20.0	18.8	16.4	14.3									
-axis	350		20.0	18.1	15.7	13.6									
Z	400		20.0	17.5	15.1	13.0									
	450		19.4	16.9	14.5	12.4									
	500		18.8	16.3	13.9	11.8									

Maximum Speed by Stroke (mm/s) (Note 4)

■GF□HB2M

	100~300 300~500 550~700 750~800 850~900				1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	
X-axis						1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 1200		.00	860	695							_							
7-avic	600																		

■GF□HB2L

	100~300 300~500 550~700 750~800 850~900					1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		<u> </u>					1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 1200 860 695		695							_									
Z-axis	300							_											

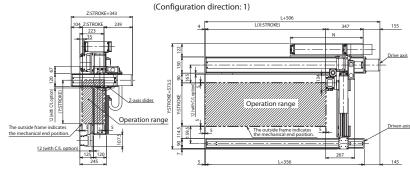
ICSB3 [ICSPB3]-GF□HB2□-CT-CT (Cable track specification)

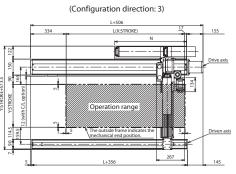
Dimensions

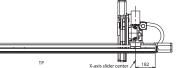


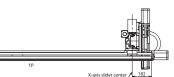


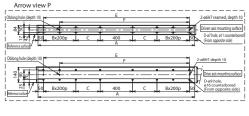
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

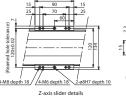




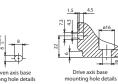










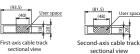






							(93.5) (40) First-axis cable tra sectional view	Jser 88

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3
C	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375





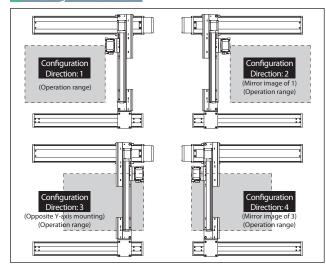
ICSB3-GF□HB3 ±10µm Battery-less Absolute XYBG+ZB (Y Side Gantry Z Base Mount X: Lg (400W) Y: Md (200W) Z: Md (200W) High X-Y-Z **High-Precision** ICSPB3-GF Specification ■ Model Specification GF□HB3□ WA **T2** Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Y-axis - Z-axis Cabil Length Management 3L: 3m 5L: 5m Refer to Explanation LL: Specified of Model Length Designations below Series Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Battery-le Absolute XSEL-RA/SA precisio... specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-GF1HB3H-①-23-45-67-T2-8-9
1	M	ICSB3[ICSPB3]-GF1HB3M-①-2③-4⑤-⑥7-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GF1HB3L-①-② ③-④ ⑤-6⑦-T2-⑥-⑨
	Н	ICSB3[ICSPB3]-GF2HB3H-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GF2HB3M-①-2 ③-4 ⑤-⑥ ⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GF2HB3L-①-②③-④⑤-T2-⑥-⑨
	Н	ICSB3[ICSPB3]-GF3HB3H-①-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GF3HB3M-①-2③-4⑤-⑥⑦-T2-⑥-⑨
	L	ICSB3[ICSPB3]-GF3HB3L-①-② ③-④ ⑤-6⑦-T2-⑧-⑨
	Н	ICSB3[ICSPB3]-GF4HB3H-①-23-43-67-T2-8-9
4	М	ICSB3[ICSPB3]-GF4HB3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
	L	ICSB3[ICSPB3]-GF4HB3L-1]-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
*2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-11-200-10-6-T2-11-7	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

*Lead is specified with ② in the above model names.

20: For Z-axis High Speed type

10: For Z-axis Medium Speed type 5: For Z-axis Low Speed type

Cable exit direction is specified with 111 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	100: 1000mm							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	30: 300mm 1 90: 900mm							
5	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm							
7	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track							

Options

The ontion codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

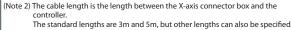
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm (H), 10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The maximum length is 15m.

in meters.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

^{*1} Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information

^{*3} Cannot be selected for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.



■GF□HB3H

_~		J
\		Y-axis stroke
		300~900
	100	
	150	
ke	200	
š	250	
Z-axis stroke	300	10.0
-axi	350	
Z	400	
	450	
	500	

■GF□HB3M

	_		Y-axis st	roke		
		300~700	750	800	850	900
	100		20.0	20.0	18.4	16.3
	150		20.0	20.0	17.7	15.6
a	200		20.0	19.5	17.1	15.0
ş	250		20.0	18.8	16.4	14.3
s st	300	20.0	20.0	18.2	15.8	13.7
Z-axis stroke	350		20.0	17.6	15.2	13.1
Z	400		19.5	17.0	14.6	12.5
	450		18.8	16.3	13.9	11.8
	500		18.2	15.7	13.3	11.2

■GF□HB3L

							Y-	axis stro	ke					
		300	350	400	450	500	550	600	650	700	750	800	850	900
	100	31.8	31.4	31.1	30.7	30.3	29.9	29.5	29.1	26.1	23.3	20.0	18.4	16.3
	150	31.1	30.7	30.4	30.0	29.6	29.2	28.8	28.4	25.4	22.6	20.1	17.7	15.6
e	200	30.5	30.1	29.8	29.4	29.0	28.6	28.2	27.8	24.8	22.0	19.5	17.1	15.0
stroke	250	29.8	29.4	29.1	28.7	28.3	27.9	27.5	27.1	24.1	21.3	18.8	16.4	14.3
s st	300	29.2	28.8	28.5	28.1	27.7	27.3	26.9	26.5	23.5	20.7	18.2	15.8	13.7
-axis	350	28.6	28.2	27.9	27.5	27.1	26.7	26.3	25.9	22.9	20.1	17.6	15.2	13.1
Z	400	28.0	27.6	27.3	26.9	26.5	26.1	25.7	25.3	22.3	19.5	17.0	14.6	12.5
	450	27.3	26.9	26.6	26.2	25.8	25.4	25.0	24.6	21.6	18.8	16.3	13.9	11.8
	500	26.7	26.3	26.0	25.6	25.2	24.8	24.4	24.0	21.0	18.2	15.7	13.3	11.2

Maximum Speed by Stroke (mm/s) (Note 4)

■GF□HB3H

	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		_					1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	— 1200 860 695									_								
Z-axis	13	1200							_										

■GF□HB3M

		100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
П	X-axis	_				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
	Y-axis	— 1200 860 695																		
П	Z-axis	6	00																	

■GF□HB3L

	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis					1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
Y-axis	— 1200 860 695			695							_								
Z-axis	300						_												

ICSB3 [ICSPB3]-GF□HB3□-CT-CT (Cable track specification)

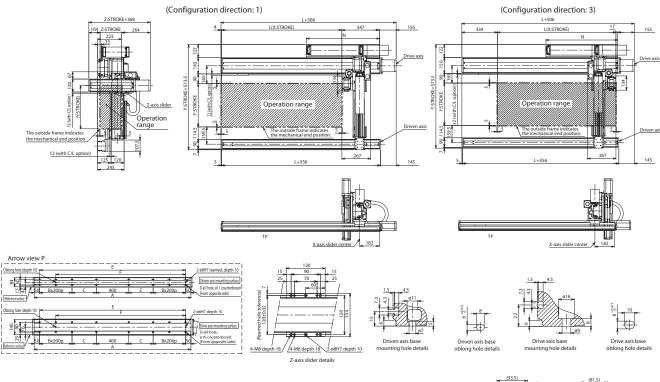
Dimensions

CAD drawings can be downloaded from our website.





* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

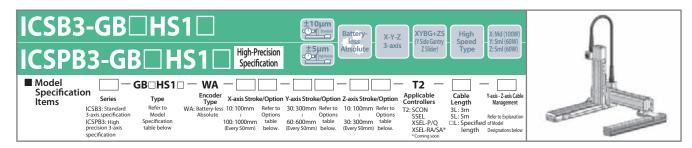


X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	- 1	1	1	2	2	2	2	3	3	3	3
С	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



Second-axis cable track sectional view



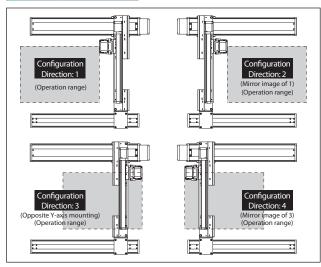


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GB1HS1M-①-② ③-④ ③-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GB1HS1L-①-②③-4 ⑤-⑥7-T2-⑧-⑨
2	M	ICSB3[ICSPB3]-GB2HS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GB2HS1L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GB3HS1M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GB3HS1L-①-②③-④⑤-⑦-T2-⑧-⑨
4	М	ICSB3[ICSPB3]-GB4HS1M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GB4HS1L-①-2③-4⑤-⑥-72-⑥-⑨

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ⑨ in the model names above
- *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	_
Y-axis	ISB[ISPB]-SXM-①-60-16-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with [③] in the above model names.

 8: For Z-axis Medium Speed type

 **To Z-axis Low Speed type
- 4: For Z-axis Low Speed type
- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- 1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information
- "3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 *4 Cannot be selected for High-Precision Specification.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/20mm
Y-axis motor output/lead	60W/16mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller The standard lengths are 3m and 5m, but other lengths can also be specified

in meters. The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The

payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GB□HS1M

100 150 3.9 3.1

■GB□HS1L

	_		Y-axis stroke										
		300	350	400	450	500	550	600					
a	100	8.0	7.9	7.6	7.2	6.9	6.5	6.2					
Š	150	7.6	7.6	7.3	6.9	6.6	6.1	5.8					
Z-axis stroke	200	7.2	7.2	6.9	6.5	6.2	5.8	5.5					
-a×	250	6.9	6.9	6.6	6.1	5.8	5.4	5.1					
Z	300	6.6	6.6	6.3	5.9	5.6	5.2	4.8					

Maximum Speed by Stroke (mm/s) (Note 4)

■GB□HS1M

	100~300	300~600	650~700	750~800	850~900	950~1000
X-axis		1200		860	695	570
Y-axis	_	960		_	_	
Z-axis	480					

■GB□HS1L

	100~300	300~600	650~700	750~800	850~900	950~1000
X-axis		1200		860	695	570
Y-axis	_	960		-	-	
Z-axis	240			_		

ICSB3 [ICSPB3]-GB□HS1□-SC-SC (Self-standing cable specification)

Dimensions

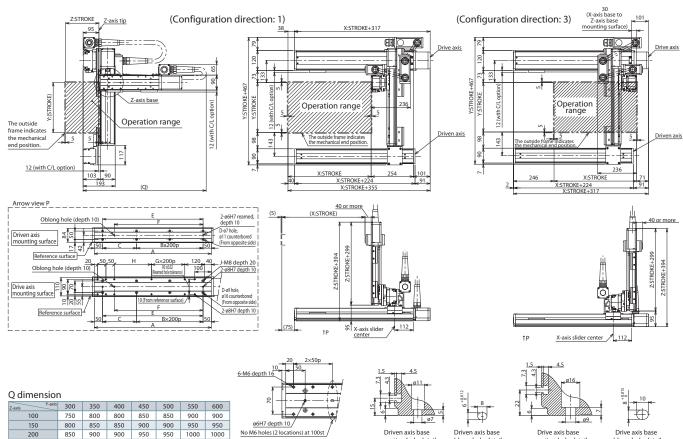
CAD drawings can be downloaded from our website.



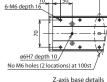




The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



Q difficilisio							
Z-axis Y-axis	300	350	400	450	500	550	600
100	750	800	800	850	850	900	900
150	800	850	850	900	900	950	950
200	850	900	900	950	950	1000	1000
250	900	950	950	1000	1000	1050	1050
300	950	1000	1000	1050	1050	1100	1100





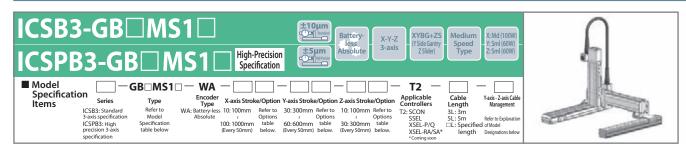






X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	- 1	1	- 1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



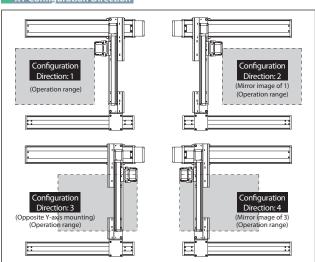


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GB1MS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
'	L	ICSB3[ICSPB3]-GB1MS1L-①-23-45-67-T2-8-9
2	M	ICSB3[ICSPB3]-GB2MS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GB2MS1L-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GB3MS1M-①-②③-④⑤-⑦-T2-⑧-⑨
3	L	ICSB3[ICSPB3]-GB3MS1L-①-②③-④⑤-⑦-T2-⑥-⑨
4	М	ICSB3[ICSPB3]-GB4MS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GB4MS1L-1]-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-10-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	_
Y-axis	ISB[ISPB]-SXM-①-60-8-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with in the above model names.

 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type
- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	10: 100mm 100: 1000mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm					
(5)	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm ? 30: 300mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable					

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information
- Please refer to P.11 for more information.

 *The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 *Cannot be selected for High-Precision Specification.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
- Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]			
Positioning repeatability	±0.01mm [±0.005mm]			
Lost motion	0.05mm [0.02mm] or less			
Guide	Integrated with base			
Base	Material: Aluminum with white alumite treatment			
X-axis motor output/lead	100W/10mm			
Y-axis motor output/lead	60W/8mm			
Z-axis motor output/lead	60W/8mm (M), 4mm (L)			

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the The standard lengths are 3m and 5m, but other lengths can also be specified

in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The

payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GB□MS1M

100 150 3.9 3.1

■GB□MS1L

			Y-axis stroke
			300~600
	roke	100	11.3
		150	10.9
	is st	200	10.5
	Z-axis stroke	250	10.1
		300	9.8

Maximum Speed by Stroke (mm/s) (Note 4)

■GB□MS1M

	100~300	300~600	650~700	750~800	850~900	950~1000			
X-axis		600		430	345	280			
Y-axis	_	480	_						
Z-axis	480								

■GB□MS1L

		100~300	300~600	650~700	750~800	850~900	950~1000				
	X-axis		600		430	345	280				
Г	Y-axis	_	480		-	_					
Г	Z-axis	240		_							

ICSB3 [ICSPB3]-GB□MS1□-SC-SC (Self-standing cable specification)

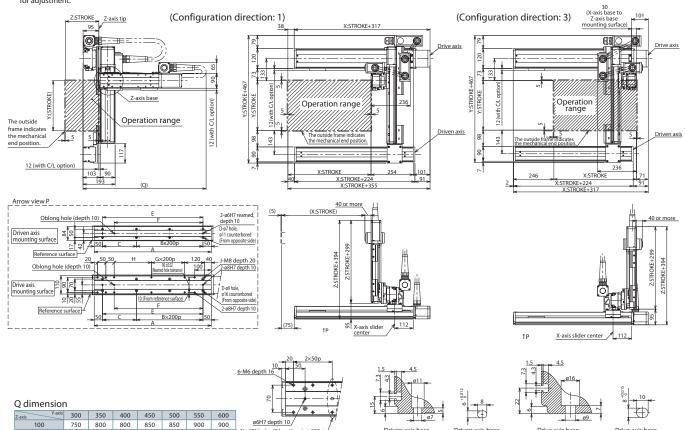
Dimensions



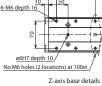




The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

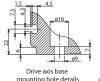


Q difficilision											
Z-axis Y-axis	300	350	400	450	500	550	600				
100	750	800	800	850	850	900	900				
150	800	850	850	900	900	950	950				
200	850	900	900	950	950	1000	1000				
250	900	950	950	1000	1000	1050	1050				
300	950	1000	1000	1050	1050	1100	1100				









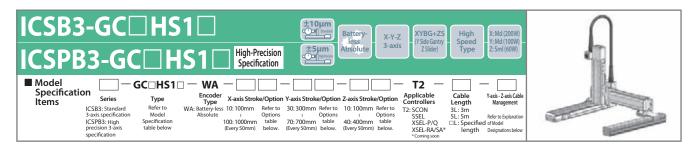


mounting hole details

Drive axis base oblong hole details

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



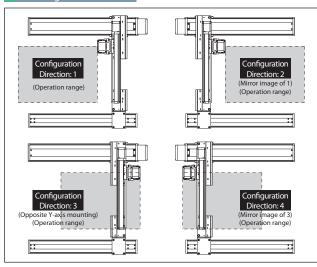


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1HS1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
Į.	L	ICSB3[ICSPB3]-GC1HS1L-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GC2HS1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GC2HS1L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3HS1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
3	L	ICSB3[ICSPB3]-GC3HS1L-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GC4HS1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GC4HS1L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-200-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with [③] in the above model names.

 8: For Z-axis Medium Speed type

 **To Z-axis Low Speed type
- 4: For Z-axis Low Speed type
- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

<u></u>							
Туре	Model	Reference page					
X-axis cable exit direction	*	See P.11, P.353					
AQ seal (standard equipment)	AQ	See P.353					
Brake (equipped as standard on Z-axis) *1	В	See P.353					
Creep sensor *2	C/CL	See P.353					
Home limit switch *2	L/LL	See P.353					
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353					
Guide with ball-retaining mechanism *4	RT	See P.354					

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as *C* and the home limit switch as *L* regardless of the mounting position. mounting position. Please refer to P.11 for more information.
- Please refer to P.11 for more information.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 4 Cannot be selected for High-Precision Specification.

 To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

 Please refer to P.11 for the cable exit direction of each axis.

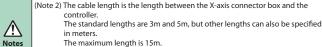
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.



■GC□HS1M

Y-axis stroke						
300~700						
4.3						
3.9						
3.5						
3.1						
2.8						
2.4						
2.1						

■GC□HS1L

ı			Y-axis stroke					
ı			300~700					
		100	11.3					
ı	a	150	10.9					
ı	Z-axis stroke	200	10.5					
ı	s st	250	10.1					
ı	-axi	300	9.8					
ı	Z	350	9.4					
ı		400	9.1					

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□HS1M

	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		1200		860	695	570
Y-axis	_	12	00		_	
Z-axis	48	30		-	-	

■GC□HS1L

	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		1200		860	695	570
Y-axis	_	12	00		_	
Z-axis	24	10		_	-	

ICSB3 [ICSPB3]-GC□HS1-SC-SC□ (Self-standing cable specification)

Dimensions

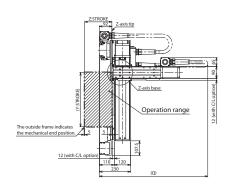
CAD drawings can be

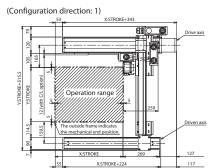


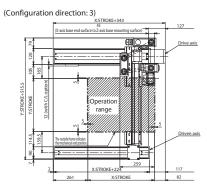


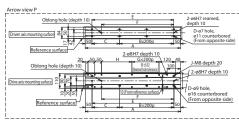


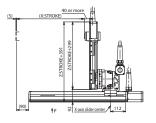
* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

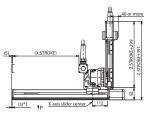


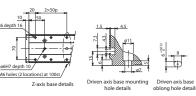


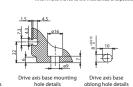












Q dimension

Quillelisio	Quillension									
Z-axis Y-axis	300	350	400	450	500	550	600	650	700	
100	800	800	800	850	850	900	900	950	950	
150	850	850	850	900	900	950	950	1000	1000	
200	900	900	900	950	950	1000	1000	1050	1050	
250	950	950	950	1000	1000	1050	1050	1100	1100	
300	1000	1000	1000	1050	1050	1100	1100	1150	1150	
350	1050	1050	1050	1100	1100	1150	1150	1200	1200	
400	1100	1100	1100	1150	1150	1200	1200	1250	1250	

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	- 1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



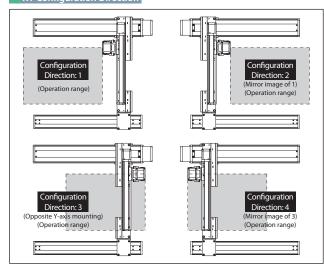
ICSB3-GC□HS3M XYBG+ZS (Y Side Gantry Z Slider) Battery-less Absolute X: Md (200W Y: Md (100W Z: Md (200W X-Y-Z Speed ICSPB3-GC□HS3 **High-Precision** Specification ■ Model Specification GC_{HS3}M WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Delatery-less in 0:100mm Refer to Options Option Delater Options Opti Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Length 3L: 3m 5L: 5m Series Y-axis - Z-axis Cab Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below WA: Bat 3L: 3m 5L: 5m Refer to E □L: Specified of Model XSEL-RA/SA length Designations be precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	М	ICSB3[ICSPB3]-GC1HS3M-①-② ③-④ ⑤-6 ⑦-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-GC2HS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
3	М	ICSB3[ICSPB3]-GC3HS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
4	М	ICSB3[ICSPB3]-GC4HS3M-①-23-43-607-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗓 through 📵 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-200-20-2-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-10-⑥-T2-⑩-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for 1 through 2 in the above model names.

 Note that the strokes are indicated in mm (millimeters).
- Cable exit direction is specified with local in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation			
1	Encoder type	WA: Battery-less Absolute			
2	X-axis stroke (Note 1)	10: 100mm 100: 1000mm			
3	X-axis option	Refer to Options table below.			
4	Y-axis stroke (Note 1)	30: 300mm			
5	Y-axis option	Refer to Options table below.			
6	Z-axis stroke (Note 1)	10: 100mm			
7	Z-axis option	Refer to Options table below.			
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m			
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable			

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position Please refer to P.11 for more information
- Please refer to P.11 for more information.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 4 Cannot be selected for High-Precision Specification.

 To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

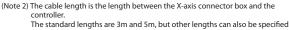
Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.

When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GC□HS3M

		Y-axis stroke								
		300	350	400	450	500	550	600	650	700
	100	13.1	13.1	13.1	13.0	13.0	13.0	13.0	12.9	11.9
a	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2
stroke	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6
s st	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9
-axis	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3
-Z	350	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.1	8.7
	400	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.3	8.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□HS3M

	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		1200		860	695	570
Y-axis	_	12	00		_	
7-axis	60	00		_		

ICSB3 [ICSPB3]-GC□HS3M-SC-SC (Self-standing cable specification)

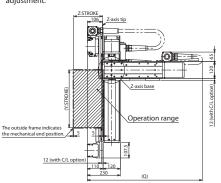
Dimensions

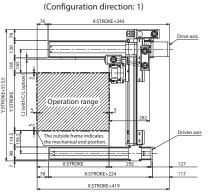


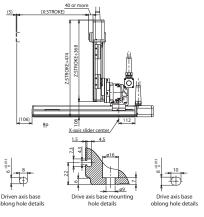


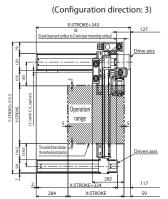


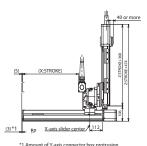
* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for











Q diffierision	1								
Z-axis Y-axis	300	350	400	450	500	550	600	650	700
100	850	850	900	900	950	950	1000	1000	1000
150	900	900	950	950	1000	1000	1050	1050	1050
200	950	950	1000	1000	1050	1050	1100	1100	1100
250	1000	1000	1050	1050	1100	1100	1150	1150	1150
300	1050	1050	1100	1100	1150	1150	1200	1200	1200
350	1100	1100	1150	1150	1200	1200	1250	1250	1250
400	1150	1150	1200	1200	1250	1250	1300	1300	1300

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	- 1	- 1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	- 1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



ICSB3-GC□MS1□ Battery-less Absolute XYBG+ZS X-Y-Z Speed Type / Side Gantr Z Slider) High-Precision ICSPB3-GC□MS Specification ■ Model Specification GC MS1 WA **T2** | Encoder | Y-axis Stroke/Option | Y-axis Stroke/Option | Z-axis Stroke/Option | Satis-Y-less | 10: 100mm | Refer to | 30: 300mm | Refer to | 10: 100mm | Refer to | Options | O Applicable Controllers Cable Length 3L: 3m 5L: 5m Series Y-axis - Z-axis Cab Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below 3L: 3m 5L: 5m Refer to E □L: Specified of Model XSEL-RA/SA precision specificati length Designations be

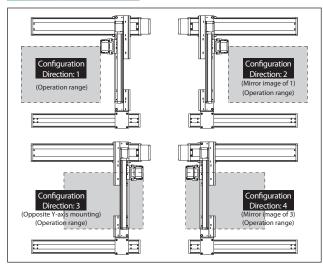
Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1MS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
'	L	ICSB3[ICSPB3]-GC1MS1L-①-②③-④⑤-72-⑧-⑨
2	М	ICSB3[ICSPB3]-GC2MS1M-①-[2] 3-4 3-6 7-T2-8-9
2	L	ICSB3[ICSPB3]-GC2MS1L-①-23-03-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3MS1M-①-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GC3MS1L-①-23-05-67-T2-8-9
4	М	ICSB3[ICSPB3]-GC4MS1M-①-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GC4MS1L-①-23-05-607-T2-0-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.

 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-10-100-10-22-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-10-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- in the above mode names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with 100 in the above model names.

 8: For Z-axis Medium Speed type

 4: For Z-axis Low Speed type
- Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm ≀ 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

when selecting multiple options, specify them in appropriate.							
Туре	Model	Reference page					
X-axis cable exit direction	*	See P.11, P.353					
AQ seal (standard equipment)	AQ	See P.353					
Brake (equipped as standard on Z-axis) *1	В	See P.353					
Creep sensor *2	C/CL	See P.353					
Home limit switch *2	L/LL	See P.353					
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353					
Guide with ball-retaining mechanism *4	RT	See P.354					

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details
- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
 *1 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.
 *Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.
 *4 Cannot be selected for High-Precision Specification.
 *1 To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 *Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

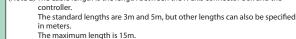
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/10mm
Y-axis motor output/lead	100W/10mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Notes

 ${\tt Contact\ IAI.\ The\ controller\ for\ this\ system\ needs\ to\ be\ purchased/prepared\ separately}.}$

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the



(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GC□MS1M

		Y-axis stroke
		300~700
	100	4.3
a	150	3.9
ş	200	3.5
Z-axis stroke	250	3.1
-ax	300	2.8
Z	350	2.4
	400	2.1

■GC□MS1L

	_	Y-axis stroke
		300~700
	100	11.3
Ν	150	10.9
a X	200	10.5
Z-axis stroke	250	10.1
ç	300	9.8
ro .	350	9.4
	400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□MS1M

	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		600		430	280	
Y-axis	_	60	00		_	
Z-axis	48	30		_	_	

■GC□MS1L

Ī		100~300	300~400	450~700	750~800	850~900	950~1000
	X-axis		600		430	345	280
	Y-axis	_	60	00		_	
ı	7-axis	24	10		_		

ICSB3 [ICSPB3]-GC□MS1□-SC-SC (Self-standing cable specification)

Dimensions

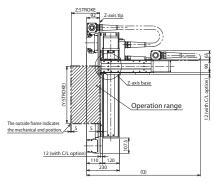
CAD drawings can be

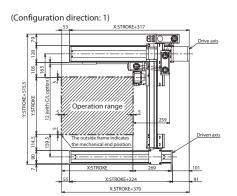


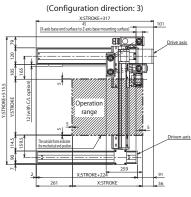


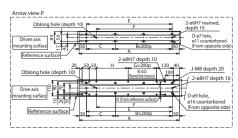


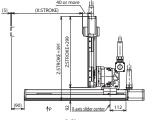
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

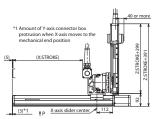




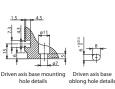


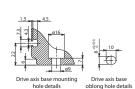












Q dimension

Z-axis Y-axis	300	350	400	450	500	550	600	650	700
100	800	800	800	850	850	900	900	950	950
150	850	850	850	900	900	950	950	1000	1000
200	900	900	900	950	950	1000	1000	1050	1050
250	950	950	950	1000	1000	1050	1050	1100	1100
300	1000	1000	1000	1050	1050	1100	1100	1150	1150
350	1050	1050	1050	1100	1100	1150	1150	1200	1200
400	1100	1100	1100	1150	1150	1200	1200	1250	1250

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	- 1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	- 1	- 1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



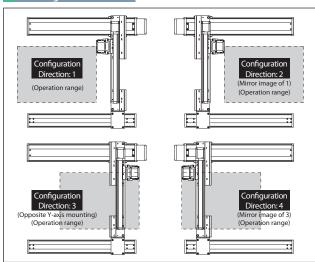
ICSB3-GC□MS3M XYBG+ZS (Y Side Gantry Z Slider) Battery-less Absolute Medium X: Md (100W X-Y-Z Speed Y: Md (100W) Z: Md (200W) High-Precision ICSPB3-GC MS3M High-Precision Specification ■ Model Specification GC□MS3M WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Delatery-less in 0:100mm Refer to Options Option Delater Options Opti Applicable Controllers Cable Length 3L: 3m 5L: 5m Series Y-axis - Z-axis Cab Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below 3L: 3m 5L: 5m Refer to Explanati □L: Specified of Model XSEL-RA/SA length Designations be precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY Configuration direction *1	Z-axis speed type	Model
1	М	ICSB3[ICSPB3]-GC1MS3M-①-②③-④⑤-⑦-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-GC2MS3M-①-②③-④⑤-⑦-T2-⑥-⑨
3	М	ICSB3[ICSPB3]-GC3MS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
4	М	ICSB3[ICSPB3]-GC4MS3M-1]-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 1 through 9 in the model names above

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-100-10-2-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-1-100-10-4-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-10-200-10-6-T2-10-7	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	10: 100mm ≀ 100: 1000mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm ≀ 40: 400mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable					

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- 1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details
- To lake option from A and/or 1 axes increases are region to the minor of units), Pietase Contact van of relatis.

 2. When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.

 Please refer to P.11 for more information.
- Please refer to P.11 for more information.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 4 Cannot be selected for High-Precision Specification.

 To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/10mm
Y-axis motor output/lead	100W/10mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the



The standard lengths are 3m and 5m, but other lengths can also be specified

The maximum length is 15m. (Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated

When the acceleration is increased, the payload will be reduced.

Cable exit direction is specified with long in the above model names. Please refer to P.11 for the exit directions.

■GC□MS3M

			Y-axi	s stroke				
		300~400	450	500	550	600	650	700
	100	14.3	14.3	14.3	14.3	14.3	14.0	11.9
a	150	13.6	13.6	13.6	13.6	13.6	13.3	11.2
호	200	13.0	13.0	13.0	13.0	13.0	12.7	10.6
Z-axis stroke	250	12.3	12.3	12.3	12.3	12.3	12.0	9.9
-ax	300	11.7	11.7	11.7	11.7	11.7	11.4	9.3
7	350	11.1	11.1	11.1	10.9	10.9	10.3	8.7
	400	10.5	10.4	10.1	9.8	9.6	9.3	8.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□MS3M

	100~300 300~400		450~700	750~800	850~900	950~1000
X-axis		600		430	345	280
Y-axis	_	60	00		_	
7-axis	61	00		_		

ICSB3 [ICSPB3]-GC□MS3M-SC-SC (Self-standing cable specification)

Dimensions

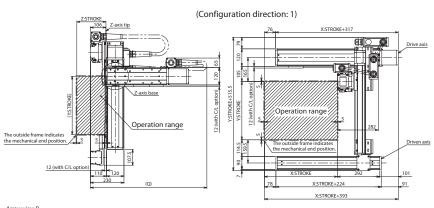
CAD drawings can be downloaded from our website.

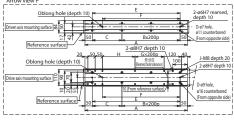


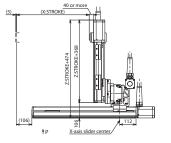


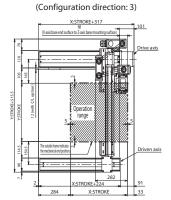


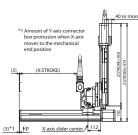
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.











Q dimension

Z-axis Y-axis	300	350	400	450	500	550	600	650	700
100	850	850	900	900	950	950	1000	1000	1000
150	900	900	950	950	1000	1000	1050	1050	1050
200	950	950	1000	1000	1050	1050	1100	1100	1100
250	1000	1000	1050	1050	1100	1100	1150	1150	1150
300	1050	1050	1100	1100	1150	1150	1200	1200	1200
350	1100	1100	1150	1150	1200	1200	1250	1250	1250
400	1150	1150	1200	1200	1250	1250	1300	1300	1300





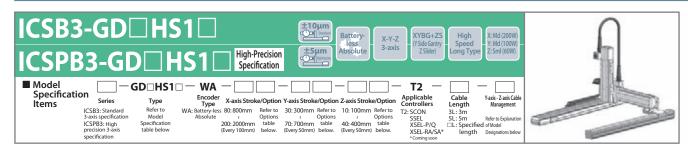






X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	- 1	1	- 1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	- 1	- 1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



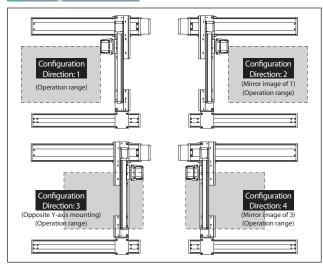


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GD1HS1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GD1HS1L-①-23-45-67-T2-8-9
2	M	ICSB3[ICSPB3]-GD2HS1M-①-②③-④⑤-⑥⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GD2HS1L-①-2③-4⑤-6⑦-T2-⑧-⑨
3	М	ICSB3[ICSPB3]-GD3HS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GD3HS1L-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GD4HS1M-①-②③-④⑤-⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GD4HS1L-1]-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-10-200-20-20-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with in the above model names.

 8: For Z-axis Medium Speed type

 4: For Z-axis Low Speed type
- Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	80: 800mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

when selecting multiple options, specify them in ulphube	tical oraci.	
Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the direction, but the creep sensor is specified in the model name as C and the notine intima switch as E regionical or mounting position.

 Please refer to P.11 for more information.

 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 *4 Cannot be selected for High-Precision Specification.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

- Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

ICSB3/ICSPB3-GD□HS1□



■GD□HS1M

		Y-axis stroke
		300~700
	100	4.3
a	150	3.9
Z-axis stroke	200	3.5
s st	250	3.1
-axi	300	2.8
Z	350	2.4
	400	2.1

■GD□HS1L

		Y-axis stroke
		300~700
	100	11.3
a	150	10.9
Z-axis stroke	200	10.5
s st	250	10.1
-axi	300	9.8
Ź	350	9.4
	400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HS1M

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis	_			1200	1100	1000	950	800	700	600	550	500	450
Y-axis	_	1200						_					
Z-axis	480							_					

■GD□HS1L

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis	_			1200	1100	1000	950	800	700	600	550	500	450
Y-axis	_	- 1200						_					
Z-axis	24	240						_					

ICSB3 [ICSPB3]-GD□HS1□-CT-SC (Cable track - Self-standing cable specification)

Dimensions

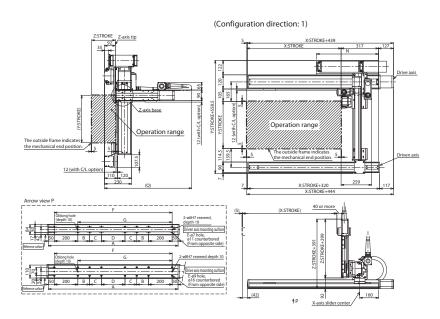
CAD drawings can be downloaded from our website.

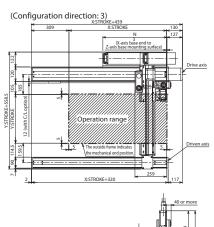


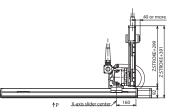




* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.





















X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
C	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125

Q dimension

Z-axis Y-axis	300	350	400	450	500	550	600	650	700
100	800	800	800	850	850	900	900	950	950
150	850	850	850	900	900	950	950	1000	1000
200	900	900	900	950	950	1000	1000	1050	1050
250	950	950	950	1000	1000	1050	1050	1100	1100
300	1000	1000	1000	1050	1050	1100	1100	1150	1150
350	1050	1050	1050	1100	1100	1150	1150	1200	1200
400	1100	1100	1100	1150	1150	1200	1200	1250	1250



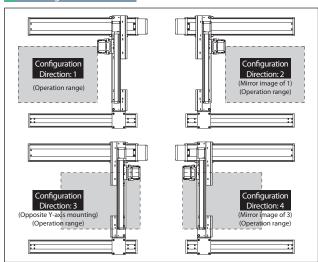
ICSB3-GD□HS3M XYBG+ZS (Y Side Gantry Z Slider) Battery-less Absolute X: Md (200W) Y: Md (100W) Z: Md (200W) X-Y-Z High-Precision ICSPB3-GD□HS3M Specification ■ Model Specification GD_{HS3M} WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Delatery-less 80:800mm Refer to 30:300mm Refer to 10:100mm Refer to Absolute Options 1 Options Options 1 Options 2 Options 3 Options 4 Opti Applicable Controllers Cable Length 3L: 3m 5L: 5m Series Y-axis - Z-axis Cab Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below 3L: 3m 5L: 5m Refer to E □L: Specified of Model CE XSEL-RA/SA length precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	М	ICSB3[ICSPB3]-GD1HS3M-①-②③-④⑤-⑥7-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-GD2HS3M-①-②③-④⑤-⑥7-T2-⑥-⑨
3	М	ICSB3[ICSPB3]-GD3HS3M-①-②③-④⑤-⑥-T2-⑥-⑨
4	М	ICSB3[ICSPB3]-GD4HS3M-1]-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗓 through 📵 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-1-200-20-2-T2-1-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-1-100-20-4-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-10-200-10-6-T2-10-7	→ Please contact IAI for more details

^{*} Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	80: 800mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ? 70: 700mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm ≀ 40: 400mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:⊡m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Model	Reference page									
*	See P.11, P.353									
AQ	See P.353									
В	See P.353									
C/CL	See P.353									
L/LL	See P.353									
NM	See P.353									
RT	See P.354									
	Model * AQ B C/CL L/LL NM									

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the direction, but the creep sensor is specimed in the model name as "C" and the home limit switch as "L" regardless of mounting position.

 Please refer to P.11 for more information.

 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

- 4 Cannot be selected for High-Precision Specification.
- *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

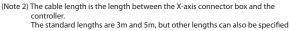
Common Specifications * Items in brackets [] are for the High-Precision Specification.

D: .	D. H. J. C105
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

 ${\tt Contact\ IAI.\ The\ controller\ for\ this\ system\ needs\ to\ be\ purchased/prepared\ separately.}$

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm



in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

Cable exit direction is specified with long in the above model names. Please refer to P.11 for the exit directions.



■GD□HS3M

			Y-axis stroke											
		300	350	400	450	500	550	600	650	700				
	100	13.1	13.1	13.1	13.0	13.0	13.0	13.0	12.9	11.9				
Z	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2				
-axis	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6				
is st	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9				
stroke	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3				
Ф	350	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.1	8.7				
	400	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.3	8.1				

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HS3M

		100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
П	X-axis	-		1200	1100	1000	950	800	700	600	550	500	450	
	Y-axis	-	1200						-					
П	Z-axis	600						-						

ICSB3 [ICSPB3]-GD□HS3M-CT-SC (Cable track - Self-standing cable specification)

Dimensions

CAD drawings can be downloaded from our website.



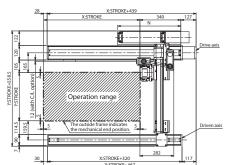




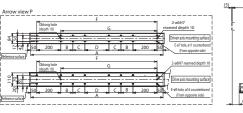
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

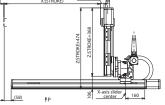
12 (with C/L option

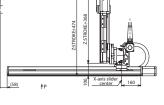
0 12 (with C/L option) Operation range



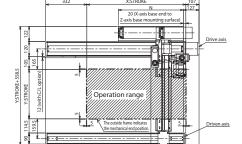
(Configuration direction: 1)



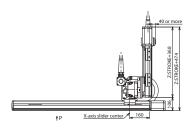








(Configuration direction: 3)



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X-	axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
	A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	В	200	200	200	250	300	350	400	450	500	550	200	200	200
	С	0	0	0	0	0	0	0	0	0	0	400	450	500
	D	200	300	400	400	400	400	400	400	400	400	400	400	400
	E	12	12	12	12	12	12	12	12	12	12	16	16	16

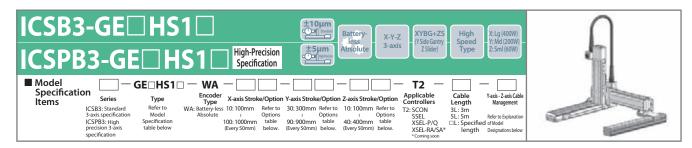
 100
 1100
 120
 130
 1400
 1500
 1600
 1700
 1800
 1900
 200
 200
 200

 800
 900
 1000
 1100
 1200
 1300
 1400
 1500
 1600
 1700
 1800
 1900
 2000
 2000

525 575 625 675 725 775 825 875 925 975 1025 1075 1125

Q dimension												
Z-axis Y-axis	300	350	400	450	500	550	600	650	700			
100	850	850	900	900	950	950	1000	1000	1000			
150	900	900	950	950	1000	1000	1050	1050	1050			
200	950	950	1000	1000	1050	1050	1100	1100	1100			
250	1000	1000	1050	1050	1100	1100	1150	1150	1150			
300	1050	1050	1100	1100	1150	1150	1200	1200	1200			
350	1100	1100	1150	1150	1200	1200	1250	1250	1250			
400	1150	1150	1200	1200	1250	1250	1300	1300	1300			



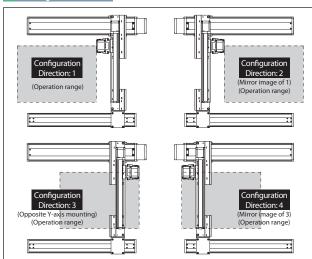


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1HS1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GE1HS1L-D-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GE2HS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GE2HS1L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3HS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GE3HS1L-①-②③-④⑤-T2-⑧-⑨
4	М	ICSB3[ICSPB3]-GE4HS1M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GE4HS1L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration *Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with in the above model names.

 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type
- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation						
1	Encoder type	WA: Battery-less Absolute						
2	X-axis stroke (Note 1)	10: 100mm						
3	X-axis option	Refer to Options table below.						
4	Y-axis stroke (Note 1)	30: 300mm						
5	Y-axis option	Refer to Options table below.						
6	Z-axis stroke (Note 1)	10: 100mm						
7	Z-axis option	Refer to Options table below.						
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m						
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable						

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

- 1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the
- direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of t mounting position.

 Please refer to P.11 for more information.

 "3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 "4 Cannot be selected for High-Precision Specification.

 "Local different X-axis and position from the permal setting indicator the cable ovid direction unable.
- * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



- (Note 2) The cable length is the length between the X-axis connector box and the controller
 - The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
 - The maximum length is 15m.
- (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.
- (Note 4) Please note that a longer stroke will result in a lower max speed.



■GE□HS1M

	■GE□H31WI									
		Y-axis stroke								
		300~900								
	100	4.3								
au	150	3.9								
rok	200	3.5								
Z-axis stroke	250	3.1								
-ax	300	2.8								
Z	350	2.4								
	400	2.1								

■GE□HS1L

	_	Y-axis stroke
		300~900
	100	11.3
e e	150	10.9
ş.	200	10.5
Z-axis stroke	250	10.1
-ax	300	9.8
7	350	9.4
	400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□HS1M

	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		12	00	920	765	
Y-axis	_	12	00	860	695	_
Z-axis	48	30		-	-	

■GE□HS1L

	100~300	300~400	450~700	750~800	850~900	950~1000		
X-axis		12	00		920	765		
Y-axis	_	12	00	860	695	_		
Z-axis	24	10		_	_			

ICSB3 [ICSPB3]-GE□HS1□-SC-SC (Self-standing cable specification)

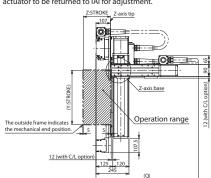
Dimensions

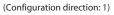
CAD drawings can be downloaded from our website.

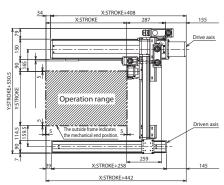


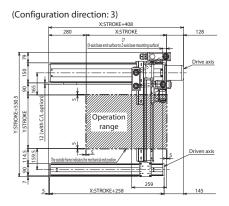


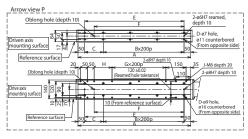
* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

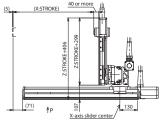


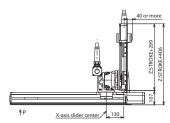


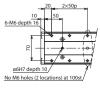




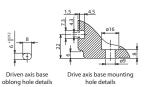












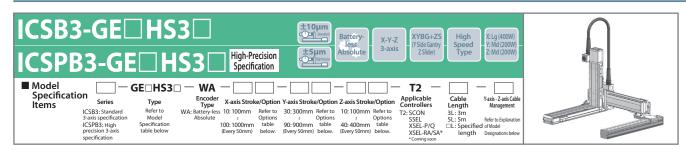


O dimension Z-axis base det

Q difficition													
Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900
100	800	800	850	850	900	900	950	950	950	1000	1000	1050	1050
150	850	850	900	900	950	950	1000	1000	1000	1050	1050	1100	1100
200	900	900	950	950	1000	1000	1050	1050	1050	1100	1100	1150	1150
250	950	950	1000	1000	1050	1050	1100	1100	1100	1150	1150	1200	1200
300	1000	1000	1050	1050	1100	1100	1150	1150	1150	1200	1200	1250	1250
350	1050	1050	1100	1100	1150	1150	1200	1200	1200	1250	1250	1300	1300
400	1100	1100	1150	1150	1200	1200	1250	1250	1250	1300	1300	1350	1350

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
Α	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538
В	0	0	- 1	- 1	- 1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
G	0	0	0	0	0	0	1	1	- 1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20



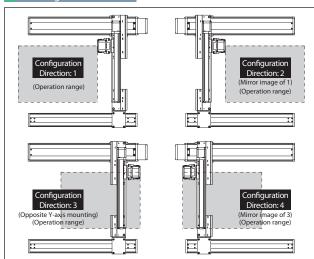


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1HS3M-①-② ③-④ ③-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GE1HS3L-①-②③-4⑤-⑥⑦-T2-⑥-⑨
2	М	ICSB3[ICSPB3]-GE2HS3M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GE2HS3L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3HS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GE3HS3L-①-23-43-67-T2-8-9
4	М	ICSB3[ICSPB3]-GE4HS3M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GE4HS3L-①-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration *Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 Lead is specified with in in the above model names.

 10: For Z-axis Medium Speed type
- 5: For Z-axis Low Speed type
- Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation						
1	Encoder type	WA: Battery-less Absolute						
2	X-axis stroke (Note 1)	10: 100mm						
3	X-axis option	Refer to Options table below.						
4	Y-axis stroke (Note 1)	30: 300mm						
5	Y-axis option	Refer to Options table below.						
6	Z-axis stroke (Note 1)	10: 100mm						
7	Z-axis option	Refer to Options table below.						
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m						
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable						

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353		
Guide with ball-retaining mechanism *4	RT	See P.354		

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
- Please refer to P.11 for more information
- Please refer to P.11 for more information.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 4 Cannot be selected for High-Precision Specification.

 To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the

controller.
The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GE□HS3M

		Y-axis stroke							
		300~900							
	100	14.3							
a	150	13.6							
Z-axis stroke	200	13.0							
s st	250	12.3							
-ax	300	11.7							
Z	350	11.1							
	400	10.5							

■GE□HS3L

	_							-axis strok	e					
		300	350	400	450	500	550	600	650	700	750	800	850	900
	100	32.9	32.9	32.9	32.8	32.8	32.8	32.8	29.7	26.7	23.9	21.4	19.0	16.9
a	150	32.3	32.2	32.2	32.2	32.2	32.2	32.1	29.0	26.0	23.2	20.7	18.3	16.2
axis stroke	200	31.7	31.7	31.7	31.7	31.5	31.1	30.7	28.4	25.4	22.6	20.1	17.7	15.6
is st	250	29.7	29.4	29.0	28.7	28.3	27.9	27.6	27.3	24.7	21.9	19.4	17.0	14.9
	300	27.0	26.7	26.4	26.0	25.7	25.4	25.1	24.8	24.1	21.3	18.8	16.4	14.3
Ż	350	24.7	24.4	24.1	23.8	23.5	23.2	22.9	22.6	22.3	20.7	18.2	15.8	13.7
	400	22.6	22.4	22.1	21.8	21.5	21.2	21.0	20.7	20.4	20.1	17.6	15.2	13.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□HS3M

	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		12	00		920	765
Y-axis	_	12	00	860	695	_
Z-axis	60	00		-	_	

■GE□HS3L

	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		12	00		920	765
Y-axis	_	12	00	860	695	_
Z-axis	30	00		_	_	

ICSB3 [ICSPB3]-GE□HS3□-SC-SC (Self-standing cable specification)

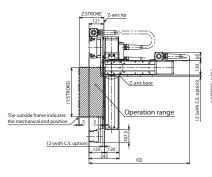
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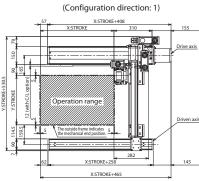


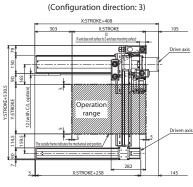


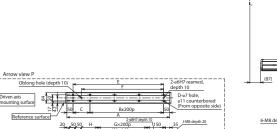


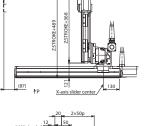
* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

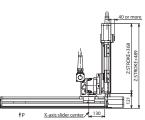


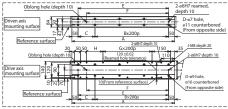


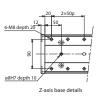


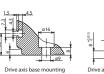












Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900
100	850	900	900	900	950	950	1000	1000	1050	1050	1100	1100	1150
150	900	950	950	950	1000	1000	1050	1050	1100	1100	1150	1150	1200
200	950	1000	1000	1000	1050	1050	1100	1100	1150	1150	1200	1200	1250
250	1000	1050	1050	1050	1100	1100	1150	1150	1200	1200	1250	1250	1300
300	1050	1100	1100	1100	1150	1150	1200	1200	1250	1250	1300	1300	1350
350	1100	1150	1150	1150	1200	1200	1250	1250	1300	1300	1350	1350	1400
400	1150	1200	1200	1200	1250	1250	1300	1300	1350	1350	1400	1400	1450

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	1	- 1	- 1	2	2	2	2	3	3	3	3	4	4	4	4	5
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	- 1	- 1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



ICSB3-GE□MS1 XYBG+ZS (Y Side Gantry Z Slider) Battery-less Absolute Medium X: Lg (200W) Y: Md (200W) Z: Md (200W) X-Y-Z Speed **High-Precision** ICSPB3-GE□MS Specification ■ Model Specification GE□MS1□ WA **T2** Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Length 3L: 3m 5L: 5m Series Y-axis - Z-axis Cab Management Туре ICSB3; Standard 3-axis specification ICSPB3; High precision 3-axis Refer to Model Specification table below 3L: 3m 5L: 5m Refer to Explanati □L: Specified of Model XSEL-RA/SA length Designations be precision : specificati

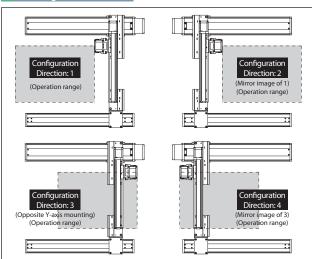
Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1MS1M-①-② ③-④ ③-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GE1MS1L-①-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GE2MS1M-①-② ③-④ ③-⑥ ⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GE2MS1L-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3MS1M-①-②③-④⑤-⑥⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GE3MS1L-1]-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GE4MS1M-①-②③-④⑤-⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GE4MS1L-1]-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.

 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-200-10-②-T2-①-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-10-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
- Note that the strokes are indicated in mm (millimeters).
 Lead is specified with [iii] in the above model names.
 8: For Z-axis Medium Speed type
 4: For Z-axis Low Speed type

- *Cable exit direction is specified with in the above model names.

 Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation						
1	Encoder type	WA: Battery-less Absolute						
2	X-axis stroke (Note 1)	10: 100mm						
3	X-axis option	Refer to Options table below.						
4	Y-axis stroke (Note 1)	30: 300mm ₹ 90: 900mm						
(5)	Y-axis option	Refer to Options table below.						
6	Z-axis stroke (Note 1)	10: 100mm						
7	Z-axis option	Refer to Options table below.						
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m						
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable						

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353		
Guide with ball-retaining mechanism *4	RT	See P.354		

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
- *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information
- Trises refer to F.1 in India minimation.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.
- Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 *4 Cannot be selected for High-Precision Specification.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/10mm
Y-axis motor output/lead	200W/10mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller.

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

ICSB3/ICSPB3-GE□MS1□



■GE□MS1M

		■GE□INI3 IINI								
			Y-axis stroke							
			300~900							
		100	4.3							
	a	150	3.9							
	rok	200	3.5							
	s st	250	3.1							
	Z-axis stroke	300	2.8							
		350	2.4							
		400	2.1							

■GE□MS1L

		Y-axis stroke
		300~900
	100	11.3
e e	150	10.9
z X	200	10.5
Z-axis stroke	250	10.1
-aX	300	9.8
7	350	9.4
	400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□MS1M

	100~300	300~400	450~700	750~800	850~900	950~1000		
X-axis		60	00		460	380		
Y-axis	_	60	00	430	345	_		
Z-axis	48	30	<u> </u>					

■GE□MS1L

		100~300	300~400	450~700	750~800	850~900	950~1000
I	X-axis		60	00	460	380	
I	Y-axis	_	60	00	430	345	_
Π	Z-axis	24	10		_	_	

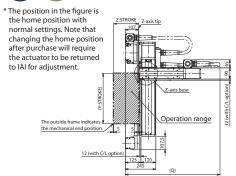
ICSB3 [ICSPB3]-GE□MS1□-SC-SC (Self-standing cable specification)

Dimensions

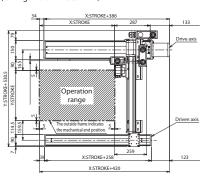


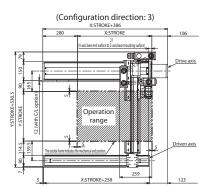


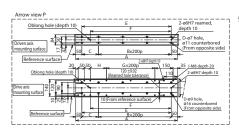


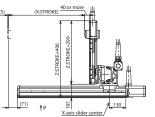


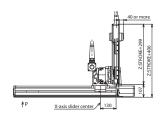
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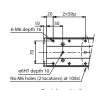




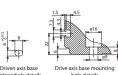














Q dimension

Quillension													
Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900
100	800	800	850	850	900	900	950	950	950	1000	1000	1050	1050
150	850	850	900	900	950	950	1000	1000	1000	1050	1050	1100	1100
200	900	900	950	950	1000	1000	1050	1050	1050	1100	1100	1150	1150
250	950	950	1000	1000	1050	1050	1100	1100	1100	1150	1150	1200	1200
300	1000	1000	1050	1050	1100	1100	1150	1150	1150	1200	1200	1250	1250
350	1050	1050	1100	1100	1150	1150	1200	1200	1200	1250	1250	1300	1300
400	1100	1100	1150	1150	1200	1200	1250	1250	1250	1300	1300	1350	1350

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
Α	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538
В	0	0	- 1	- 1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
С	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20



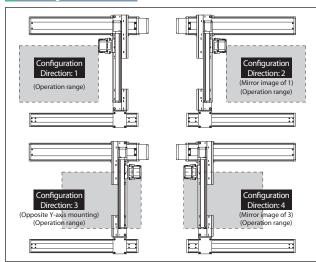
ICSB3-GE□MS3L XYBG+ZS (Y Side Gantry Z Slider) Battery-less Absolute Medium X: Lg (200W) Y: Md (200W) Z: Md (200W) X-Y-Z Speed High-Precision ICSPB3-GE□MS Specification ■ Model Specification GE_{MS3}L WA **T2** Encoder Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Battery-less 10: 100mm Refer to Options Option Z-axis Stroke/Option Z-axis Z-Applicable Controllers T2: SCON SSEL XSEL-P/Q Cable Length 3L: 3m 5L: 5m Series Y-axis - Z-axis Cab Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below 3L: 3m 5L: 5m Refer to Explanati □L: Specified of Model XSEL-RA/SA precision specificati length Designations be

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GE1MS3L-①-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GE2MS3L-①-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GE3MS3L-①-②③-④⑤-⑥-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GE4MS3L-①-23-43-67-T2-8-9

^{*1} Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-200-10-②-T2-⑩-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	_
Y-axis	ISB[ISPB]-MXM-①-200-10-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-5-⑥-T2-⑩-⑦	→ Please contact IAI for more details

- Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. in the above model names.

 Note that the strokes are indicated in mm (millimeters).
- Cable exit direction is specified with 100 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm ≀ 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ¹ 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L3m 5L5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical orde

when selecting multiple options, specify them in approached order.								
Туре	Model	Reference page						
X-axis cable exit direction	*	See P.11, P.353						
AQ seal (standard equipment)	AQ	See P.353						
Brake (equipped as standard on Z-axis) *1	В	See P.353						
Creep sensor *2	C/CL	See P.353						
Home limit switch *2	L/LL	See P.353						
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353						
Guide with ball-retaining mechanism *4	RT	See P.354						

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information
- Please refer to P.11 for more information.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).

 To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

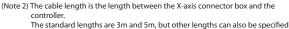
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/10mm
Y-axis motor output/lead	200W/10mm
Z-axis motor output/lead	200W/5mm

Applicable Controllers

Notes

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GE□MS3L

			Y-axis stroke											
		300	350	400	450	500	550	600	650	700	750	800	850	900
	100	34.3	34.3	34.3	34.3	34.3	34.3	33.1	29.7	26.7	23.9	21.4	19.0	16.9
a	150	33.6	33.6	33.6	33.6	33.6	33.6	32.4	29.0	26.0	23.2	20.7	18.3	16.2
stroke	200	33.0	33.0	33.0	33.0	33.0	33.0	31.8	28.4	25.4	22.6	20.1	17.7	15.6
sst	250	32.3	32.3	32.3	32.1	31.8	31.4	31.0	27.7	24.7	21.9	19.4	17.0	14.9
-axis	300	30.1	29.8	29.5	29.1	28.8	28.4	28.1	27.1	24.1	21.3	18.8	16.4	14.3
Ż	350	27.5	27.2	26.9	26.5	26.2	25.9	25.6	25.3	23.5	20.7	18.2	15.8	13.7
	400	25.2	24.9	24.7	24.3	24.1	23.7	23.5	23.2	22.9	20.1	17.6	15.2	13.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□MS3L

ſ		100~300	300~400	450~700	750~800	850~900	950~1000
ĺ	X-axis		60	00	460	380	
ĺ	Y-axis	_	60	00	430	345	_
П	7-axis	3(00		_	_	

ICSB3 [ICSPB3]-GE□MS3L-SC-SC (Self-standing cable specification)

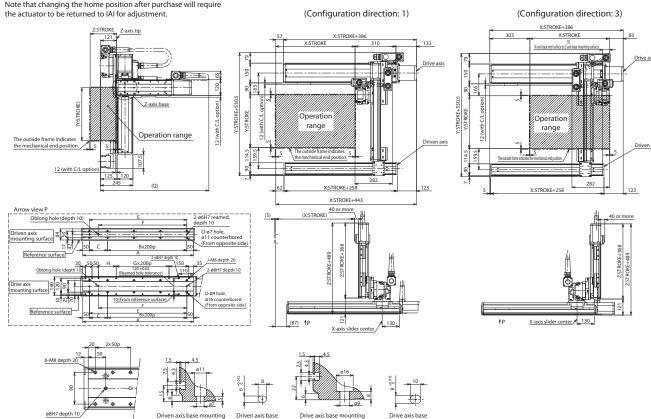
Dimensions







* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require

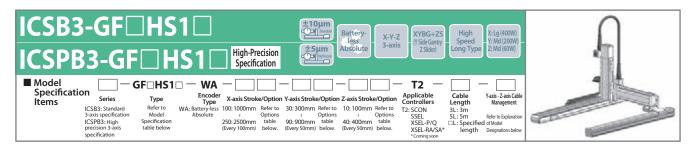


Q dimension

Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900
100	850	900	900	900	950	950	1000	1000	1050	1050	1100	1100	1150
150	900	950	950	950	1000	1000	1050	1050	1100	1100	1150	1150	1200
200	950	1000	1000	1000	1050	1050	1100	1100	1150	1150	1200	1200	1250
250	1000	1050	1050	1050	1100	1100	1150	1150	1200	1200	1250	1250	1300
300	1050	1100	1100	1100	1150	1150	1200	1200	1250	1250	1300	1300	1350
350	1100	1150	1150	1150	1200	1200	1250	1250	1300	1300	1350	1350	1400
400	1150	1200	1200	1200	1250	1250	1300	1300	1350	1350	1400	1400	1450

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Α	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	- 1	- 1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18



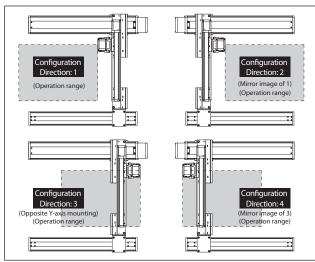


Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GF1HS1M-①-② ③-④ ⑤-⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GF1HS1L-D-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GF2HS1M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GF2HS1L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GF3HS1M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GF3HS1L-D-D3-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GF4HS1M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
	L	ICSB3[ICSPB3]-GF4HS1L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-⑪-⑦	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with ⑩ in the above model names.

 8: For Z-axis Medium Speed type

- 4: For Z-axis Low Speed type
- Cable exit direction is specified with in the above model names.
 Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order

when selecting multiple options, specify them in appropriate.								
Туре	Model	Reference page						
X-axis cable exit direction	*	See P.11, P.353						
AQ seal (standard equipment)	AQ	See P.353						
Brake (equipped as standard on Z-axis) *1	В	See P.353						
Creep sensor *2	C/CL	See P.353						
Home limit switch *2	L/LL	See P.353						
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353						
Guide with ball-retaining mechanism *4	RT	See P.354						

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
- Please refer to P.11 for more information
- Please refer to P.11 for more information.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.

 Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

 * Cannot be selected for High-Precision Specification.

 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).

(Note 2) The cable length is the length between the X-axis connector box and the controller The standard lengths are 3m and 5m, but other lengths can also be specified

in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed

Notes



■GF□HS1M

Y-axis stroke 300-900 100 4.3 150 3.9 200 3.5 250 3.1 300 2.8 350 2.4 400 2.1

■GF□HS1L

	_	Y-axis stroke
		300~900
	100	11.3
e e	150	10.9
ş.	200	10.5
Z-axis stroke	250	10.1
-ax	300	9.8
7	350	9.4
	400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GF□HS1M

	100~300	300~400	450~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340		
Y-axis	— 1200 860 695			695															
Z-axis	480																		

■GF□HS1L

	100~300	300~400	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500		
X-axis				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340		
Y-axis	_	- 1200 860 695										_							
7-axis	240									_									

ICSB3 [ICSPB3]-GF□HS1□-CT-SC (Self-standing cable + Cable track specification)

Dimensions

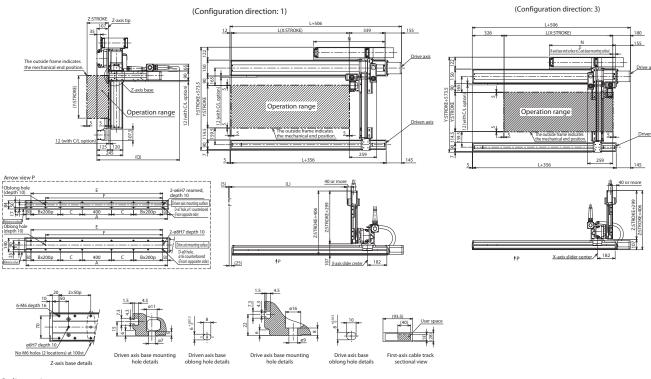
CAD drawings can be downloaded from our website.







* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



Q dimension

Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900
100	800	800	850	850	900	900	950	950	950	1000	1000	1050	1050
150	850	850	900	900	950	950	1000	1000	1000	1050	1050	1100	1100
200	900	900	950	950	1000	1000	1050	1050	1050	1100	1100	1150	1150
250	950	950	1000	1000	1050	1050	1100	1100	1100	1150	1150	1200	1200
300	1000	1000	1050	1050	1100	1100	1150	1150	1150	1200	1200	1250	1250
350	1050	1050	1100	1100	1150	1150	1200	1200	1200	1250	1250	1300	1300
400	1100	1100	1150	1150	1200	1200	1250	1250	1250	1300	1300	1350	1350

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2424	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3
С	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375



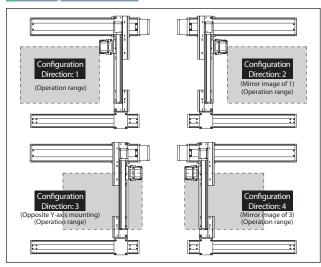
ICSB3-GF□HS3 Battery-less Absolute XYBG+ZS X: Lg (400W) Y: Md (200W) Z: Md (200W) X-Y-Z ' Side Gam Z Slider) High-Precision ICSPB3-GF Specification ■ Model Specification GF□HS3□ WA **T2** | Encoder | Y-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option D-axis Stroke/Opti Applicable Controllers Cable Length 3L: 3m 5L: 5m Series Y-axis - Z-axis Cab Management Туре ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis Refer to Model Specification table below SL: 3m SL: 5m Refer to Explaine... CL: Specified of Model length Designations below WA · Batt OF THE XSEL-RA/SA precision : specificati

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GF1HS3M-①-② ③-④ ③-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GF1HS3L-①-23-45-67-T2-8-9
2	M	ICSB3[ICSPB3]-GF2HS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑥-⑨
2	L	ICSB3[ICSPB3]-GF2HS3L-①-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GF3HS3M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
3	L	ICSB3[ICSPB3]-GF3HS3L-①-②③-④⑤-0-T2-⑧-⑨
4	М	ICSB3[ICSPB3]-GF4HS3M-①-② ③-④ ⑤-⑦-T2-⑥-⑨
4	L	ICSB3[ICSPB3]-GF4HS3L-①-23-43-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-11-200-10-6-T2-11-7	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with [0] in the above model names.

 10: For Z-axis Medium Speed type

 **Exet Z axis Hedium Speed type

 **Exet Z axis Hedium Speed type

- 5: For Z-axis Low Speed type
- Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Model	Reference page
*	See P.11, P.353
AQ	See P.353
В	See P.353
C/CL	See P.353
L/LL	See P.353
NM	See P.353
RT	See P.354
	Model * AQ B C/CL L/LL NM

- *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information
- Please refer to P.11 for more information.

 3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM),
 To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the
 home position after purchase will require the actuator to be returned to IAI for adjustment.

 4 Cannot be selected for High-Precision Specification.

 To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

 Please refer to P.11 for the cable exit direction of each axis.

- Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm



(Note 2) The cable length is the length between the X-axis connector box and the controller.

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



■GF□HS3M

Y-axis stroke 300-900 100 14.3 150 13.6 200 13.0 250 12.3 300 11.7 350 11.1 400 10.5

■GF□HS3L

	_							-axis strok	e					
		300	350	400	450	500	550	600	650	700	750	800	850	900
	100	32.9	32.9	32.9	32.8	32.8	32.8	32.8	29.7	26.7	23.9	21.4	19.0	16.9
a	150	32.3	32.2	32.2	32.2	32.2	32.2	32.1	29.0	26.0	23.2	20.7	18.3	16.2
axis stroke	200	31.7	31.7	31.7	31.7	31.5	31.1	30.7	28.4	25.4	22.6	20.1	17.7	15.6
is st	250	29.7	29.4	29.0	28.7	28.3	27.9	27.6	27.3	24.7	21.9	19.4	17.0	14.9
	300	27.0	26.7	26.4	26.0	25.7	25.4	25.1	24.8	24.1	21.3	18.8	16.4	14.3
Ż	350	24.7	24.4	24.1	23.8	23.5	23.2	22.9	22.6	22.3	20.7	18.2	15.8	13.7
	400	22.6	22.4	22.1	21.8	21.5	21.2	21.0	20.7	20.4	20.1	17.6	15.2	13.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GF□HS3M

	100~300	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500				
X-axis			_			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	<u> </u>		860	695							_								
7-axis	6	00																	

■GF□HS3L

	100~300	300~400	450~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis			_			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	_	— 1200		860	695							_							
Z-axis	30	00								_									

ICSB3 [ICSPB3]-GF□HS3□-CT-SC (Cable track - Self-standing cable specification)

Dimensions

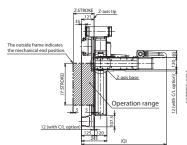
CAD drawings can be

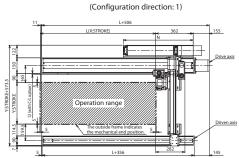




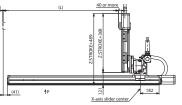


*The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.















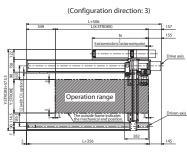


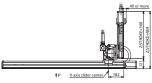


Q dimension

Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900
100	850	900	900	900	950	950	1000	1000	1050	1050	1100	1100	1150
150	900	950	950	950	1000	1000	1050	1050	1100	1100	1150	1150	1200
200	950	1000	1000	1000	1050	1050	1100	1100	1150	1150	1200	1200	1250
250	1000	1050	1050	1050	1100	1100	1150	1150	1200	1200	1250	1250	1300
300	1050	1100	1100	1100	1150	1150	1200	1200	1250	1250	1300	1300	1350
350	1100	1150	1150	1150	1200	1200	1250	1250	1300	1300	1350	1350	1400
400	1150	1200	1200	1200	1250	1250	1300	1300	1350	1350	1400	1400	1450

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2424	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	- 1	- 1	1	1	2	2	2	2	3	3	3	3
С	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375







High-Precision Specification



XMYB X Multi-Slide Y Base Moun High X: Lg (400W) Y: Md (200W Speed Type

Specification Items

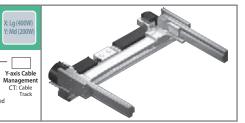
ICSPA4 Series ICSPA4: High precision 4-axis (2-axis + 2-axis) specification

Type Refer to Model Specification table below

Encoder Type X-axis Stroke/Option Y1/Y2-axis Stroke/Option A: Absolute | 25: 250mm | Refer to |
|: Incremental | 25: 2250mm | table | (Every 50mm) | table | below.

20: 200mm Refer to Options 70: 700mm table (Every 50mm) below.

T2 Applicable Cable M Controllers Length M T2: SCON 3L: 3m XSEL-P/Q 5L: Specified *Coming soon Length

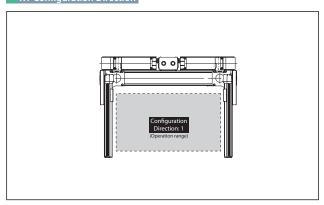


Model Specification

XY configuration direction *1	Model
1	ICSPA4-B3N1H-①-②

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of \bigcirc through \bigcirc in the model names above.

XY Configuration Direction



Axis Configuration

Axis configuration	Model	Reference page
X-axis	NS-LXMM-①-400-40-②-T2-③-NT1	→ Please contact IAI for more details
Y1-axis	ISPA-MYM-1-200-20-4-T2-5	→ Please contact IAI for more details
Y2-axis	ISPA-MYM-11-200-20-41-T2-5	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at upper right for ① through ⑤ in the above model names.
- Note that the strokes are indicated in mm (millimeters).
- Note: Although the rotating nut types and linear servo types are equipped with cable tracks even for individual axes, a different cable track is used when it is assembled in a Cartesian system, so replacement actuators should specify the no-cable track specification (NT1).

Maximum Speed by Stroke (mm/s)

	200	250 300 400 500 600 700 800~2											
X-axis	_												
Y1-axis, Y2-axis		1200 — —											

Payload by Acceleration/Deceleration (kg) (Note 3)

				Y-axis	stroke		
		200	300	400	500	600	700
	0.3	21.2	20.3	19.4	18.4	17.5	16.6
	0.4	12.2	11.3	10.4	9.4	8.5	7.6
_	0.5	7.7	6.8	5.9	4.9	4.0	3.1
ratio	0.6	3.2	2.3	1.4	_	_	_
Acceleration	0.7	_	_	_	_	_	_
<	0.8	_	_	_	_	_	_
	0.9	_	_	_	_	_	_
	1.0	_	_	_	_	_	_

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	A: Absolute I: Incremental
2	X-axis stroke (Note 1)	25:250mm 225:2250mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	20:200mm
5	Y-axis option	Refer to Options table below.
6	Cable length (Note 2)	3L:3m 5L:5m □L:□m
7	Y-axis Cable Management	CT: Cable track

^{*} The above shows details of ① through ② for the model names on the left.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
AQ seal (standard equipment)	AQ	See P.353
Brake (Y-axis only) *1	В	See P.353
Creep sensor *2	С	See P.353
Home limit switch *2	L	See P.353
Non-motor end specification (Y-axis only)	NM	See P.353
Guide with ball-retaining mechanism	RT	See P.354

- *1 Brake option for Y-axis increases the length of the non-motor side. Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the
- mounting position.
 Please refer to P.11 for more information.

Common Specifications

Drive system	Ball screw, equivalent to rolled C5
Positioning repeatability	±0.01mm
Lost motion	0.02mm or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/40mm
Y-axis motor output/lead	200W/20mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the



controller The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 20m.

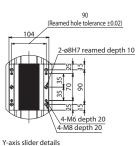


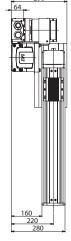
ICSPA4-B3N1H-CT (Cable track specification)



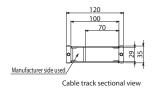


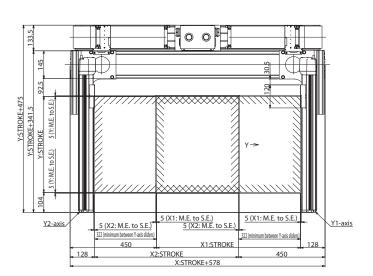
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

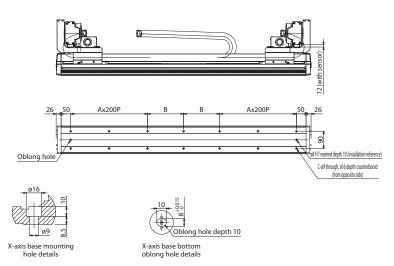




Arrow view Y







X stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Α	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3
В	138	163	188	213	238	263	288	113	138	163	188	213	238	263	288	313	138	163	188	213
С	10	10	10	10	10	10	10	14	14	14	14	14	14	14	14	14	18	18	18	18

A	3	3	3	3	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6
В	238	263	288	313	138	163	188	213	238	263	288	313	138	163	188	213	238	263	288	313	138
С	18	18	18	18	22	22	22	22	22	22	22	22	26	26	26	26	26	26	26	26	30

X stroke | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 | 1550 | 1600 | 1650 | 1700 | 1750 | 1800 | 1850 | 1900 | 1950 | 2000 | 2050 | 2100 | 2150 | 2200 | 2250



High-Precision





X: Lg (400W) Y: Md (200W Speed Type

Specification Items

ICSPA4 Series

ICSPA4: High precision 4-axis (2-axis + 2-axis) specification

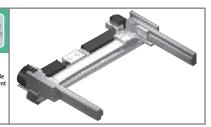
Type Refer to Model Specification table below

Encoder Type X-axis Stroke/Option Y1/Y2-axis Stroke/Option

20: 200mm Refer to Options 70: 700mm table (Every 50mm) below.

T2 Applicable Cable Months of the Controllers Length Months of the Controllers Cable Months of the Controllers Coming soon Cable Months of the Cable Mont

Y-axis Cable Management CT: Cable Track

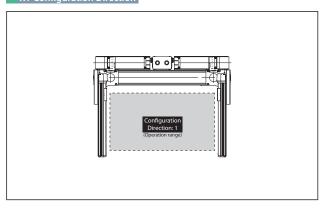


Model Specification

XY configuration direction *1	Model
1	ICSPA4-B3N1M-①-② ③-④ ⑤-T2-⑥-⑦

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of \bigcirc through \bigcirc in the model names above.

XY Configuration Direction



Axis Configuration

Axis configuration	Model	Reference page
X-axis	NS-LXMM-①-400-20-②-T2-③-NT1	→ Please contact IAI for more details
Y1-axis	ISPA-MYM-1-200-20-4-T2-5	→ Please contact IAI for more details
Y2-axis	ISPA-MYM-11-200-20-41-T2-5	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at upper right for ① through ⑤ in the above model names.
- Note that the strokes are indicated in mm (millimeters).
- Note: Although the rotating nut types and linear servo types are equipped with cable tracks even for individual axes, a different cable track is used when it is assembled in a Cartesian system, so replacement actuators should specify the no-cable track specification (NT1).

Maximum Speed by Stroke (mm/s)

	200	250	300	400	500	600	700	800~	2250		
X-axis	_		1300								
Y1-axis, Y2-axis		1200 — —							_		

Payload by Acceleration/Deceleration (kg) (Note 3)

		Y-axis stroke									
		200	300	400	500	600	700				
	0.3	40.0	40.0	33.0	27.3	22.9	19.3				
	0.4	30.0	30.0	30.0	27.3	22.9	19.3				
_	0.5	21.6	21.6	21.6	21.6	21.6	19.3				
ratio	0.6	18.0	18.0	18.0	18.0	17.5	16.6				
Acceleration	0.7	15.3	14.9	14.0	13.0	12.1	11.2				
<	0.8	12.2	11.3	10.4	9.4	8.5	7.6				
	0.9	0.9 9.5		7.7	6.7	5.8	4.9				
	1.0	6.8	5.9	5.0	_	_	_				

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	A: Absolute I: Incremental
2	X-axis stroke (Note 1)	25:250mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	20:200mm
(5)	Y-axis option	Refer to Options table below.
6	Cable length (Note 2)	3L:3m 5L:5m □L:□m
7	Y-axis Cable Management	CT: Cable track

^{*} The above shows details of ① through ② for the model names on the left.

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
AQ seal (standard equipment)	AQ	See P.353
Brake (Y-axis only) *1	В	See P.353
Creep sensor *2	С	See P.353
Home limit switch *2	L	See P.353
Non-motor end specification (Y-axis only)	NM	See P.353
Guide with ball-retaining mechanism	RT	See P.354

- *1 Brake option for Y-axis increases the length of the non-motor side. Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the
- mounting position.
 Please refer to P.11 for more information.

Common Specifications

Drive system	Ball screw, equivalent to rolled C5
Positioning repeatability	±0.01mm
Lost motion	0.02mm or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm

Applicable Controllers

Notes

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).

(Note 2) The cable length is the length between the X-axis connector box and the The standard lengths are 3m and 5m, but other lengths can also be specified

in meters. The maximum length is 20m.



ICSPA4-B3N1M-CT (Cable track specification)

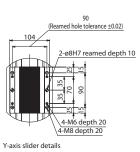
Dimensions

CAD drawings can be downloaded from our website.

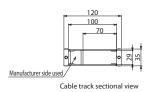


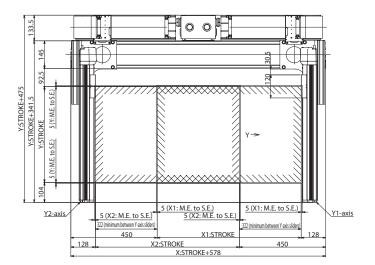


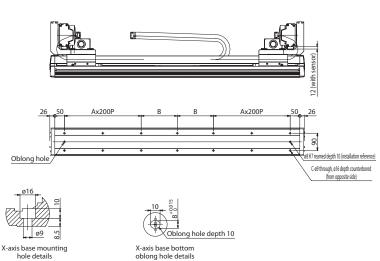
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

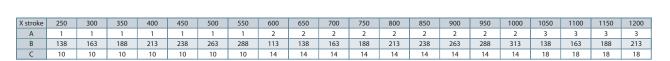












X stroke	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250
Α	3	3	3	3	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6
В	238	263	288	313	138	163	188	213	238	263	288	313	138	163	188	213	238	263	288	313	138
C	18	18	18	18	22	22	22	22	22	22	22	22	26	26	26	26	26	26	26	26	30



6-B3N1HB3

High-Precision Specification



XMYB+ZE 6-axis (NS+ISPA)

High Speed Type Y: Md (200W) Z: Md (200W)

ICSPA6-B3N1HB3□ Specification Items

Series ICSPA6: High precision 6-axis (3-axis + 3-axis) specification Type Encoder Type

Refer to A: Absolute

Model Specification table below I: Incremental

X-axis Stroke/Option Y-axis Stroke/Option 25: 250mm Refer to Options 225: 2250mm table (Every 50mm) Refer to Options 1 0ptions 225: 2250mm table (Every 50mm) below.

Z1/Z2-axis Stroke/ Option 10: 100mm Refer to 10: 100mm Refer to Options 50: 500mm table (Every 50mm) below.

T2 Applicable Controllers T2: SCON XSEL-P/Q XSEL-RA/SA* *Coming soor Cable Length 3L:3m 5L:5m L:Spec leng Y-axis - Z-axis Cab



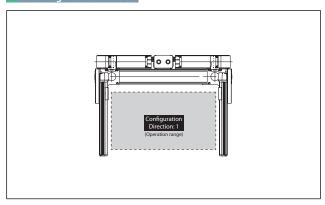
Model Specification

XY configuration direction *1	Z-axis speed type *2	Model
1	Н	ICSPA6-B3N1HB3H-①-23-45-67-T2-8-9
'	М	ICSPA6-B3N1HB3M-1-23-45-62-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

 Please refer to the table on the right for details of ① through ⑧ in the model names above.

XY Configuration Direction



Axis Configuration

Axis configuration	Model	Reference page
X-axis	NS-LXMM-①-400-40-②-T2-③-NT1	→ Please contact IAI for more details
Y1-axis	ISPA-MYM-1-200-20-4-T2-5	→ Please contact IAI for more details
Y2-axis	ISPA-MYM-11-200-20-41-T2-5	→ Please contact IAI for more details
Z1-axis	ISPA-MXM-1-200-10-6-T2-7	→ Please contact IAI for more details
Z2-axis	ISPA-MXM-11-200-101-61-T2-77	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at upper right for ① through ② in the above model names.

- the above model names.

 Note that the strokes are indicated in mm (millimeters).

 *Lead is specified with 180 in the above model names.

 20: For Z-axis High Speed type

 10: For Z-axis Medium Speed type

 Note: Although the rotating nut types and linear servo types are equipped with cable tracks even for individual axes, a different cable track is used when it is assembled in a Cartesian system, so replacement actuators should specify the no-cable track specification (NT1).

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	A: Absolute I: Incremental
2	X-axis stroke (Note 1)	25:250mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	20:200mm ¹ 70:700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10:100mm ≀ 50:500mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
AQ seal (standard equipment)	AQ	See P.353
Brake (Y/Z-axis only (equipped as standard on Z-axis)) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification (Y/Z-axis only)	NM	See P.353
Guide with ball-retaining mechanism	RT	See P.354

- *1 Brake option for Y-axis increases the length of the non-motor side. Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.

Common Specifications

Drive system	Ball screw, equivalent to rolled C5
Positioning repeatability	±0.01mm
Lost motion	0.02mm or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/40mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm <h>, 10mm <m></m></h>

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 20m.



Payload (kg)

■B3N1HB3H

		Y-axis stroke										
		200	300	400	400 500		700					
	100		9.0		8.2	7.2	6.2					
oke	~ 200	9	.0	8.3	7.2	6.2	5.2					
Z-axis stroke	~ 300	9.0	8.3	7.3	6.2	5.2	4.2					
Z-a>	~ 400	8.2	7.3	6.3	5.2	4.2	3.2					
	~ 500	7.1	6.2	5.2	4.1	3.1	2.1					

Maximum Speed by Stroke (mm/s)

■B3N1HB3H

		Stroke										
	100	200	250	250 300 400 500 600 700 800~2250								
X-axis	_	_				24	00					
Y-axis	_				1200				_	_		
Z-axis		1200 — — —										

■B3N1HB3M

			Y-axis stroke										
		200	300	400	500	600	700						
	100	11.2	10.2	9.2	8.2	7.2	6.2						
stroke	~ 200	10.2	9.3	8.3	7.2	6.2	5.2						
cis str	~ 300	9.0	8.3	7.3	6.2	5.2	4.2						
Z-axis	~ 400	8.2	7.3	6.3	5.2	4.2	3.2						
	~ 500	7.1	6.2	5.2	4.1	3.1	2.1						

■B3N1HB3M

		Stroke										
	100	200	250 300 400 500 600 700 800~2250									
X-axis	_	_		2400								
Y-axis	_		1200 — —									
Z-axis		600										

ICSPA6-B3N1HB3□-CT-CT (Cable track specification)

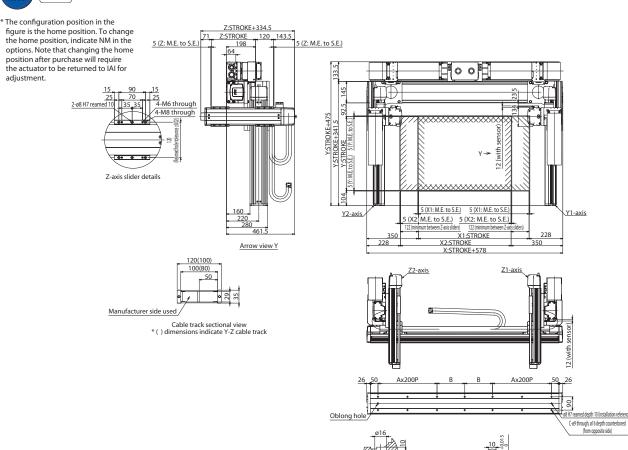
Dimensions

CAD drawings can be downloaded from our website.

M.E: Mechanical end S.E: Stroke end







X stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Α	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3
В	138	163	188	213	238	263	288	113	138	163	188	213	238	263	288	313	138	163	188	213
С	10	10	10	10	10	10	10	14	14	14	14	14	14	14	14	14	18	18	18	18

X stroke	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250
Α	3	3	3	3	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6
В	238	263	288	313	138	163	188	213	238	263	288	313	138	163	188	213	238	263	288	313	138
С	18	18	18	18	22	22	22	22	22	22	22	22	26	26	26	26	26	26	26	26	30

X-axis base mounting hole details

long hole depth 10

X-axis base bottom oblong hole details



High-Precision



XMYB+ZE 6-axis (NS+ISPA)

Medium Speed Type Y: Md (200W) Z: Md (200W)

Specification Items

ICSPA6─B3N1MB3□ Series ICSPA6: High precision 6-axis (3-axis + 3-axis) specification

Encoder Type A : Absolute I : Incremental Туре

X-axis Stroke/Option Y-axis Stroke/Option Refer to Options ≀ Options table below. (Every 50mm) below. 25: 250mm 225: 2250mm (Every 50mm)

Z1/Z2-axis Stroke/ Option 10:100mm Refer to Options table 50: 500mm ta (Every 50mm) be

T2 Applicable Controllers T2: SCON XSEL-P/Q XSEL-RA/SA* *Coming soor Cable Length 3L:3m 5L:5m L:Spec leng Y-axis - Z-axis Cab



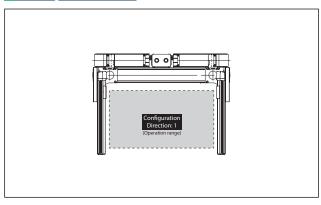
Model Specification

XY configuration direction *1	Z-axis speed type *2	Model
1	Н	ICSPA6-B3N1MB3H-①-23-43-62-T2-8-9
'	М	ICSPA6-B3N1MB3M-1)-23-45-67-T2-8-9

- *1 Please refer to the following diagram under XY Configuration Direction.
- The payload and the max speed may vary depending on the type of Z-axis.

 Please refer to the table on the right for details of 1 through 9 in the model names above.

XY Configuration Direction



Axis Configuration

Axis configuration	Model	Reference page
X-axis	NS-LXMM-①-400-20-②-T2-③-NT1	→ Please contact IAI for more details
Y1-axis	ISPA-MYM-1-200-20-4-T2-5	→ Please contact IAI for more details
Y2-axis	ISPA-MYM-11-200-20-41-T2-5	→ Please contact IAI for more details
Z1-axis	ISPA-MXM-11-200-101-61-T2-7	→ Please contact IAI for more details
Z2-axis	ISPA-MXM-11-200-10-6-T2-7	→ Please contact IAI for more details

- * Refer to the symbols within the table Explanation of Model Designations at upper right for ① through ② in the above model names.

 Note that the strokes are indicated in mm (millimeters).
 *Lead is specified with ⑩ in the above model names.
 20. For Z-axis High Speed type
 10. For Z-axis Medium Speed type
 10. For Z-axis Medium Speed type
 Note although the greating out those and linear serve types are equipped with cable tracks even for individual.

- Note: Although the rotating nut types and linear servo types are equipped with cable tracks even for individual axes, a different cable track is used when it is assembled in a Cartesian system, so replacement actuators should specify the no-cable track specification (NT1).

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	A: Absolute I: Incremental
2	X-axis stroke (Note 1)	25:250mm ≀ 225:2250mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	20:200mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10:100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
AQ seal (standard equipment)	AQ	See P.353
Brake (Y/Z-axis only (equipped as standard on Z-axis)) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification (Y/Z-axis only)	NM	See P.353
Guide with ball-retaining mechanism	RT	See P.354

- *1 Brake option for Y-axis increases the length of the non-motor side. Please contact IAI for details.
- *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

mounting position.
Please refer to P.11 for more information.

Common Specifications

Drive system	Ball screw, equivalent to rolled C5
Positioning repeatability	±0.01mm
Lost motion	0.02mm or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm <h>, 10mm <m></m></h>

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 20m.



Payload (kg)

■B3N1MB3H

				Y-axis	stroke					
		200	300	400	500	600	700			
	100	9.0								
oke	~ 200		7.9							
Z-axis stroke	~ 300		6.9							
Z-ax	~ 400			9.0			5.9			
	~ 500			9.0			4.8			

Maximum Speed by Stroke (mm/s)

■B3N1MB3H

	Stroke												
	100	200	250	250 300 400 500 600 700 800~									
X-axis	_	_		1300									
Y-axis	_				1200				_	_			
Z-axis		1200 — — —								_			

■B3N1MB3M

			Y-axis stroke										
		200	300	400	500	600	700						
	100		19.0		17.0	12.6	8.9						
oke	~ 200		19.0		16.1	11.6	7.9						
Z-axis stroke	~ 300		19.0		15.1	10.6	6.9						
Z-a>	~ 400		19.0		14.1	9.6	5.9						
	~ 500	19	0.0	18.8	13.0	8.5	4.8						

■B3N1MB3M

					Str	oke					
	100	200	250	300	400	500	600	700	800~	2250	
X-axis	_	_		1300							
Y-axis	_				1200				_	_	
Z-axis		600 — — — —								_	

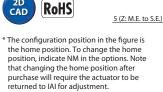
ICSPA6-B3N1MB3□-CT-CT (Cable track specification)

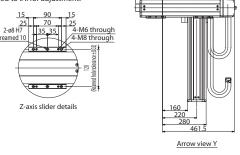


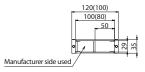
CAD drawings can be downloaded from our website.

M.E: Mechanical end S.E: Stroke end

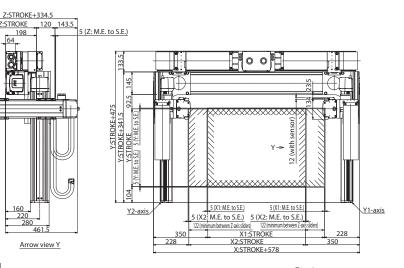
Z:STROKE

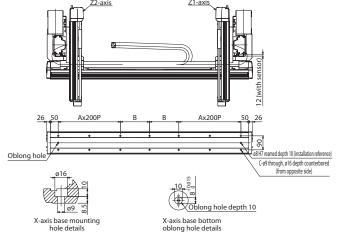






Cable track sectional view
* () dimensions indicate Y-Z cable track





X stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Α	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3
В	138	163	188	213	238	263	288	113	138	163	188	213	238	263	288	313	138	163	188	213
С	10	10	10	10	10	10	10	14	14	14	14	14	14	14	14	14	18	18	18	18

X stroke	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250
Α	3	3	3	3	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6
В	238	263	288	313	138	163	188	213	238	263	288	313	138	163	188	213	238	263	288	313	138
С	18	18	18	18	22	22	22	22	22	22	22	22	26	26	26	26	26	26	26	26	30



High-Precision Specification



XMYB+ZS XYZ+XYZ 6-axis (NS+ISPA)



High Speed Type Y: Md (200W) Z: Md (200W)

ICSPA6-B3N1HS3M Specification Items

Series ICSPA6: High precision 6-axis (3-axis + 3-axis) specification Туре

Encoder Type A : Absolute I : Incrementa

X-axis Stroke/Option Y-axis Stroke/Option 25: 250mm Refer to 20: 200mm Refer to al ≀ Options 225: 2250mm table (Every 50mm) below. (Every 50mm) below.

Z1/Z2-axis Stroke/ Option 10: 100mm Refer to ? Options 40: 400mm table (Every 50mm) below.

T2 Applicable Controllers T2: SCON XSEL-P/Q XSEL-RA/SA* *Coming soor Cable Length 3L:3m 5L:5m L:Spec leng Y-axis - Z-axis Cab



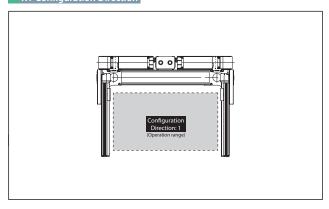
Model Specification

XY configuration direction *1	Z-axis speed type	Model
1	M	ICSPA6-B3N1HS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨

*1 Please refer to the following diagram under XY Configuration Direction.

Please refer to the table on the right for details of ① through ② in the model names above.

XY Configuration Direction



Axis Configuration

Axis configuration	Model	Reference page
X-axis	NS-LXMM-①-400-40-②-T2-③-NT1	→ Please contact IAI for more details
Y1-axis	ISPA-MYM-1-200-20-4-T2-5	→ Please contact IAI for more details
Y2-axis	ISPA-MYM-11-200-20-41-T2-5	→ Please contact IAI for more details
Z1-axis	ISPA-MZM-11-200-10-6-T2-7	→ Please contact IAI for more details
Z2-axis	ISPA-MZM-①-200-10-⑥-T2-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at upper right for through in the above model names.

Note that the strokes are indicated in mm (millimeters).

Note: Although the rotating nut types and linear servo types are equipped with cable tracks even for individual axes, a different cable track is used when it is assembled in a Cartesian system, so replacement actuators should specify the no-cable track specification (NT1).

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	A: Absolute I: Incremental
2	X-axis stroke (Note 1)	25:250mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	20:200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10:100mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
AQ seal (standard equipment)	AQ	See P.353
Brake (Y/Z-axis only (equipped as standard on Z-axis)) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (Y/Z-axis only (standard Z-axis setting))	NM	See P.353
Guide with ball-retaining mechanism	RT	See P.354

*1 Brake option for Y-axis increases the length of the non-motor side. Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position

Please refer to P.11 for more information.

*3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

Common Specifications

Drive system	Ball screw, equivalent to rolled C5
Positioning repeatability	±0.01mm
Lost motion	0.02mm or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/40mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).



(Note 2) The cable length is the length between the X-axis connector box and the controller

The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 20m.



Payload (kg)

■B3N1HS3M

				Y-axis	stroke		
		200	300	400	400 500		700
a	100	11.5	10.5	9.5	8.4	7.5	6.5
strok	~ 200	10.5	9.5	8.5	7.4	6.5	5.5
Z-axis stroke	~ 300	9.5	8.5	7.5	6.4	5.5	4.5
Z	~ 400	8.4	7.4	6.5	5.4	4.4	3.4

Maximum Speed by Stroke (mm/s)

■B3N1HS3M

	Stroke												
	100	200	250	300	400	500	600	700	800~	2250			
X-axis	_	_		2400									
Y-axis	_				1200				_	_			
Z-axis			600			_	_	_	_	_			

ICSPA6-B3N1HS3M-CT-CT (Cable track specification)

Z:STROKE+403.5

Z:STROKE+334.5 5 (Z: M.E. to S.E.)

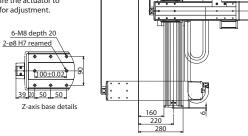
CAD drawings can be downloaded from our website.

M.E: Mechanical end S.E: Stroke end

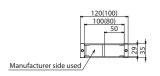
Z:STROKE



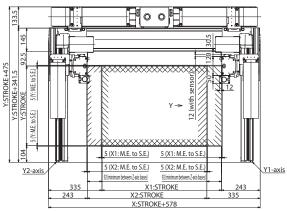
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

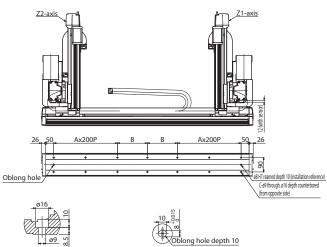


Arrow view Y



Cable track sectional view
* () dimensions indicate Y-Z cable track





V//X	
L	ø9 5.
Y-avic ha	see mounting

us base mounting hole details

Oblong hole depth 10
X-axis base bottom oblong hole details

X stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Α	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3
В	138	163	188	213	238	263	288	113	138	163	188	213	238	263	288	313	138	163	188	213
С	10	10	10	10	10	10	10	14	14	14	14	14	14	14	14	14	18	18	18	18

X stroke	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250
Α	3	3	3	3	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6
В	238	263	288	313	138	163	188	213	238	263	288	313	138	163	188	213	238	263	288	313	138
С	18	18	18	18	22	22	22	22	22	22	22	22	26	26	26	26	26	26	26	26	30



6-B3N1MS3N

ICSPA6-B3N1MS3M

High-Precision Specification





Speed Type

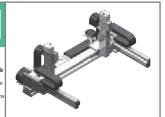
Specification Items

Series ICSPA6: High precision 6-axis (3-axis + 3-axis) specification Type Encoder Type
Refer to A: Absolute
Model Specification table below I: Incremental

X-axis Stroke/Option Y-axis Stroke/Option 25: 250mm Refer to Options 225: 2250mm table (Every 50mm) Refer to Options 1 0ptions 225: 2250mm table (Every 50mm) below.

Z1/Z2-axis Stroke/ Option 10: 100mm Refer to ? Options 40: 400mm table (Every 50mm) below.

T2 Applicable Controllers T2: SCON XSEL-P/Q XSEL-RA/SA* *Coming soor Cable Length 3L:3m 5L:5m L:Spec leng Y-axis - Z-axis Cab



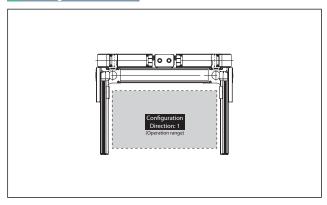
Model Specification

XY configuration direction *1	Z-axis speed type	Model
1	М	ICSPA6-B3N1MS3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨

*1 Please refer to the following diagram under XY Configuration Direction.

Please refer to the table on the right for details of ① through ② in the model names above.

XY Configuration Direction



Axis Configuration

Axis configuration	Model	Reference page
X-axis	NS-LXMM-①-400-20-②-T2-③-NT1	→ Please contact IAI for more details
Y1-axis	ISPA-MYM-1-200-20-4-T2-5	→ Please contact IAI for more details
Y2-axis	ISPA-MYM-①-200-20④-T2-⑤	→ Please contact IAI for more details
Z1-axis	ISPA-MZM-1-200-10-6-T2-7	→ Please contact IAI for more details
Z2-axis	ISPA-MZM-①-200-10-⑥-T2-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at upper right for ① through ② in the above model names.

Note that the strokes are indicated in mm (millimeters).

Note: Although the rotating nut types and linear servo types are equipped with cable tracks even for individual axes, a different cable track is used when it is assembled in a Cartesian system, so replacement actuators should specify the no-cable track specification (NT1).

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	A: Absolute I: Incremental
2	X-axis stroke (Note 1)	25: 250mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	20: 200mm ? 70: 700mm
(5)	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm ≀ 40: 400mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
AQ seal (standard equipment)	AQ	See P.353
Brake (Y/Z-axis only (equipped as standard on Z-axis)) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification * (Y/Z-axis only (standard Z-axis setting))	NM	See P.353
Guide with ball-retaining mechanism (equipped as standard on X-axis)	RT	See P.354

*1 Brake option for Y-axis increases the length of the non-motor side. Please contact IAI for details.

*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the mounting position.

Please refer to P.11 for more information.

The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

Common Specifications

Drive system	Ball screw, equivalent to rolled C5
Positioning repeatability	±0.01mm
Lost motion	0.02mm or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm

(Note 2) The cable length is the length between the X-axis connector box and the controller. Notes The standard lengths are 3m and 5m, but other lengths can also be specified

The maximum length is 20m.



Payload (kg)

■B3N1MS3M

			Y-axis stroke									
		200	200 300 400 500 600									
a	100	13.0										
strok	~ 200		8.1									
Z-axis stroke	~ 300		10.7									
Z	~ 400		6.1									

Maximum Speed by Stroke (mm/s)

■B3N1MS3M

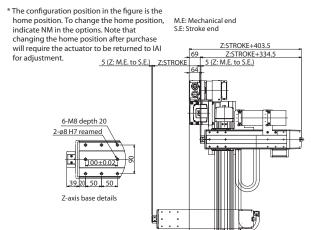
		Stroke											
	100	200	250	300	400	500	600	700	800~	2250			
X-axis	_	_		1300									
Y-axis	_			1200 — —									
Z-axis			600			_	_	_	_	_			

ICSPA6-B3N1MS3M-CT-CT (Cable track specification)

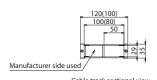
Dimensions





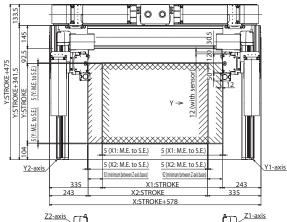


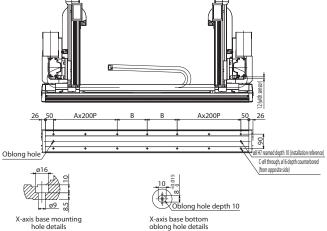
Arrow view Y



Cable track sectional view
* () dimensions indicate Y-Z cable track

160





axis base mounting hole details	X-axis base bo oblong hole d

X stroke	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Α	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3
В	138	163	188	213	238	263	288	113	138	163	188	213	238	263	288	313	138	163	188	213
С	10	10	10	10	10	10	10	14	14	14	14	14	14	14	14	14	18	18	18	18

X stroke	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250
Α	3	3	3	3	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	6
В	238	263	288	313	138	163	188	213	238	263	288	313	138	163	188	213	238	263	288	313	138
С	18	18	18	18	22	22	22	22	22	22	22	22	26	26	26	26	26	26	26	26	30

Cartesian Robot Options

Cable exit direction

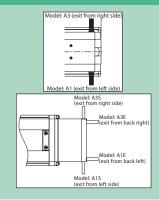
Model A1/A3

Description Specify when changing the actuator cable exit direction.

Model A1S/A1E/A3S/A3E

Description The exit direction of the actuator cable can be selected from back left, side left, back right and side right.

* It is required to select an exit direction.



AQ seal

Model

A0

R

AQ seal is a lubricant unit that uses a lubricating member made of lubricating oil solidified with resin.

Because it is a porous member that contains a large amount of lubricating oil, the oil seeps out on the surface through capillary action. Lubricating oil is supplied by pressing the AQ seal on the surface of the guide and ball screw (steel ball rolling surface), enabling long-term use without maintenance in a synergistic effect by the combined use of the grease.

Brake

Model

Description

When used vertically, this works as a holding mechanism that prevents the Z-axis slider from falling and damaging any attached fittings when the power or servo is turned off.

As the Z-axis is designed to be used vertically, a brake will be equipped as a standard feature.

For axes other than the Z-axis, please use the brake option as required.

Creep sensor

Model

C / CL

Description A sensor for performing homing at high speed.

As homing is normally done by pressing the slider against the stopper on the motor side stroke end and reversing it, the homing speed is kept to 10~20mm/s. Therefore, types with long stroke take time until homing is completed. In order to shorten this, the proximity sensor is used to return the slider at high speed halfway through, then drop the speed to normal homing return speed just before home. The mounting position of the sensor is by default on the right side of the actuator body as viewed from the motor side (C) and the left side for the opposite type (CL).

The mounting position of the sensor is determined by the axis configuration direction. Please refer to P.11 for more information.

Home limit switch

Model

Description

When performing home return, the standard type determines the home position by pushing against the mechanical end and reversing. This option allows reverse motion to be triggered by a

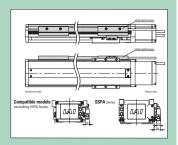
Use when changing or adjusting the reversing position during home return or confirming that the home position has been reached.

The mounting position of the limit switch and cover is by default on the right side of the actuator body as viewed from the motor side (L) and the left side for the opposite type (LL).

The mounting position of the sensor is determined by the axis configuration direction. Please refer to P.11 for more information.

* IS(S)P-W has a limit switch equipped as standard.

Also, as the limit switch is built into the body, there is no cover on the body side.



Non-motor end specification

Model

Description

The normal home position is set to the motor side, but this is the option to set the home position on the other side in order to accommodate variations in equipment layout, etc. (Please note that changing the home position after the actuators are shipped may require the products to be sent back to IAI for re-setting.)

Guide with ball-retaining mechanism

Model

Description

RT

A spacer (retainer) is placed between steel balls of the guide in order to reduce noise and extend the service life.

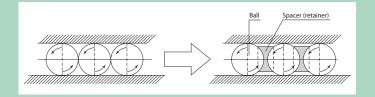
It eliminates metallic noise due to balls colliding with each other, reducing harsh noise.

It reduces wear caused by friction of balls, extending the life of the guide.

It eliminates the interference between balls, making the movement smoother and improving the operating capability of the slider.

* It cannot be used with ISB/ISPB-SXL/MXL/LXL or ISA/ISPA-WXM/WXMX.



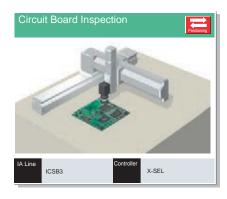


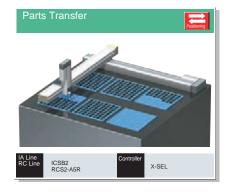
Cartesian Robot Application Examples

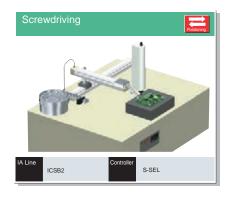


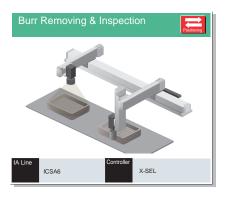
















ICSB&ICSA Series Catalogue No. 0417-E

The information contained in this catalog is subject to change without notice for the purpose of product inprovement





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